REPORT RESUMES

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HANDBOOK FOR DEVELOPING AND OPERATING AGRICULTURAL OCCUPATIONS PROGRAMS.

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THE RESPONSIBILITY OF VOCATIONAL AGRICULTURE IN TRAINING FOR AGRICULTURALLY RELATED OCCUPATIONS IN ADDITION TO FARMING AND RANCHING PROMPTED THE DEVELOPMENT OF THIS DETAILED GUIDE TO ASSIST ADMINISTRATORS, COUNSELORS, ADVISORY COMMITTEE MEMBERS, BUSINESS REPRESENTATIVES, AND TEACHERS IN DEVELOPING NEW AGRICULTURAL OCCUPATIONS PROGRAMS AND REVISING EXISTING PROGRAMS. SECTIONS INCLUDE (1) A DESCRIPTION OF THE AGRICULTURAL OCCUPATIONS PROGRAM, (2) ADVANTAGES, (3) ORGANIZATIONAL PROCEDURES, (4) THE COMMUNITY SURVEY, (5) THE ADVISORY COUNCIL, (6) PUBLIC RELATIONS, (7) POLICIES, (8) FACILITIES AND EQUIPMENT, (9) STUDENT SELECTION, (10) TRAINING CENTER SELECTION, (11) TRAINING PLANS AND AGREEMENTS, (12) INSTRUCTIONAL MATERIALS, (13) PROGRAM COORDINATION, (14) RECORDS, AND (15) PROGRAM EVALUATION. EACH SECTION HAS GENERAL INFORMATION, BUT THE EMPHASIS IS ON SPECIFIC REQUIREMENTS AND STEP-BY-STEP PROCEDURES FOR ACCOMPLISHING EACH PHASE OF THE PROGRAM. MANY EXAMPLES OF ACTIVITIES AND MATERIALS SUCH AS SPEECHES, MEETINGS, SCHEDULES, NEWS RELEASES, INSTRUCTIONAL MATERIALS, AND FORMS OF VARIOUS KINDS ARE INCLUDED. THE APPENDIX CONTAINS (1) STATE LABOR LAWS, (2) FEDERAL LABOR STANDARDS, (3) STUDENT-LEARNER CERTIFICATES, (4) STUDENT-LEARNER CERTIFICATE APPLICATION, (5) HAZARDOUS OCCUPATIONS ORDERS, (6) SOCIAL SECURITY, WITHHOLDING TAX, AND LABOR UNIONS REGULATIONS, (7) A PARTIAL LIST OF OFF-FARM AGRICULTURAL OCCUPATIONS, (8) GENERAL INFORMATION CONCERNING INTERVIEW TECHNIQUES, (9) A SAMPLE TRAINING COMPLETION CERTIFICATE, (10) A SAMPLE COOPERATING INSTRUCTOR CERTIFICATE, AND (11) A GLOSSARY. (JM)

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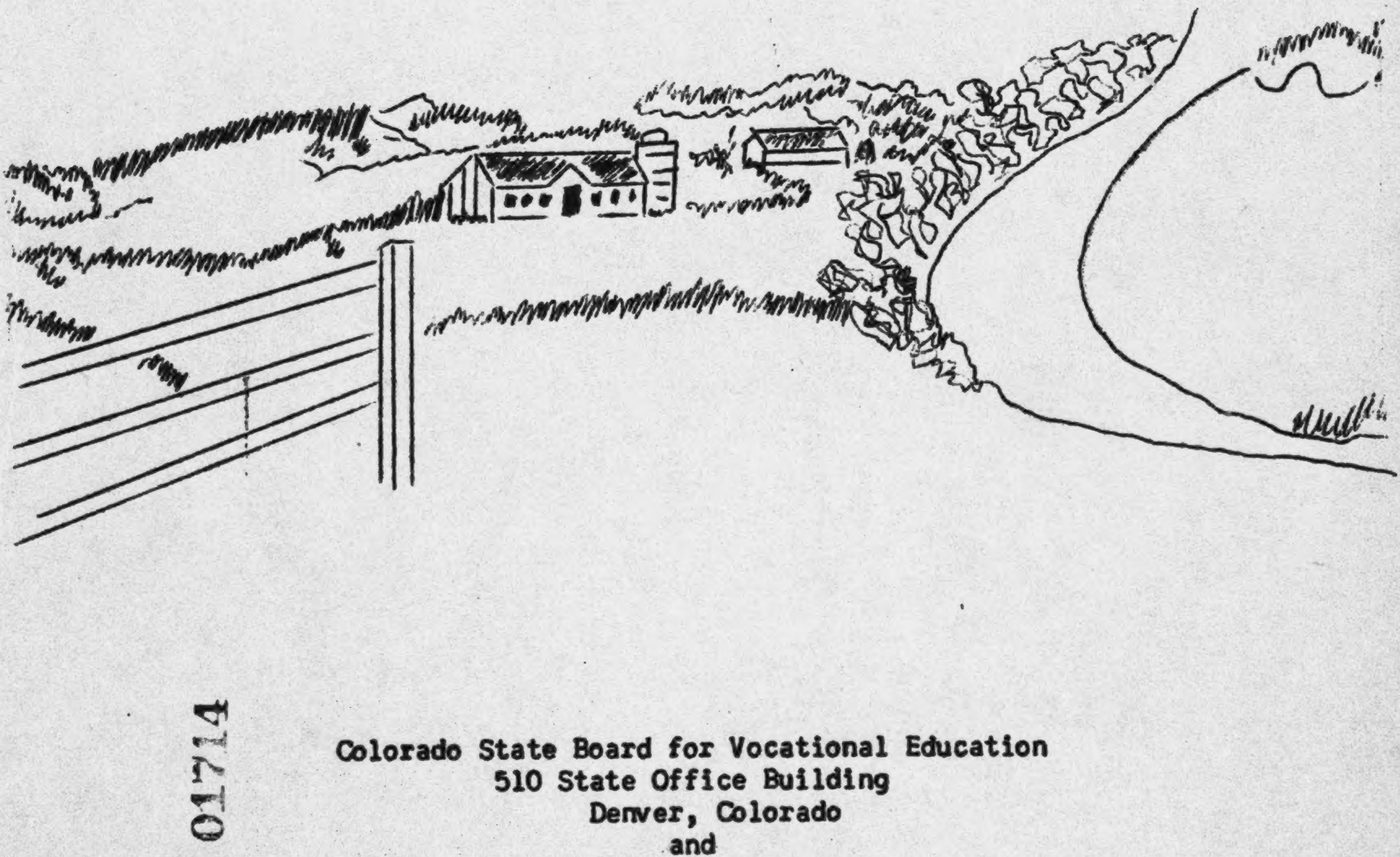

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ACKNOWLEDGMENTS

This handbook is an accumulation of ideas and materials from a variety of sources in many states. We are especially grateful to the members of the Colorado State University 1964 summer session class VE 240 under the direction of Dr. Raymond Clark and VE 285 under the direction of Dr. Gordon McMahon for the ideas and materials they contributed. We are also indebted to the Vocational Agriculture Staffs in Arkansas and Kentucky for the use we made of similar publications developed by those two states.

Contributions from the various D. E. and D. O. publications in a great many states were also valuable resource materials.

INTRODUCTION

Agriculture is the largest industry in the United States today. It has been estimated that 40 million people are employed in occupations related to agriculture. Although the per cent of actual farmers in the total population has declined, the total number of people involved in production agriculture will likely remain fairly constant in the future. This means that many young men must enter this phase of agriculture to meet the replacement demands. This situation, coupled with the large number of jobs becoming available in agricultural related occupations creates a need for more agriculturally trained personnel than has been experienced previously.

The Vocational Education Act of 1963 authorizes training for nonfarm agricultural occupations. The responsibility for meeting the educational needs of the many individuals involved in these occupations is placed upon vocational agriculture. The need for training for farming and ranching is still vital. Now the additional responsibility of training for agriculturally related occupations is a part of the vocational agriculture program. Therefore the vocational agriculture program must now be expanded in order to train for occupational competency in the additional areas mentioned.

The following material is provided as a guide for developing new agricultural occupations programs in the public schools of Colorado, and also for revising the existing programs to meet the expanded objectives. It is hoped that this material will help answer the many prevalent questions concerning the program. This material should be of special interest to school administrators, counselors, advisory committee members, representatives of business and industry and vocational agriculture instructors.

SECTION I

DESCRIPTION OF THE AGRICULTURAL OCCUPATIONS PROGRAM

The main purpose of the agricultural occupations program is to provide supervised training for gainful employment in occupations related to agriculture. The high school program is accomplished by establishing a cooperative arrangement between the school and the agricultural businesses and industry in the community. It is designed to enable 11th or 12th grade students to receive specific on-the-job training in their chosen occupations while completing the requirements for a high school diploma. The student spends part of the regular school day working in the "Training Center". The remainder of the school day will be spent at school completing the necessary requirements for graduation and attending a class where instruction related to each specific occupation is offered. The on-the-job training given at the "Training Center" will be under the direction of an instructor selected from the firm or business in which the student is working. The agricultural occupations teacher-coordinator has the responsibility for providing the related instruction and coordinating the program.

A partial list of some of the agricultural occupations other than farming and ranching can be found in the Appendix G. It is realized that the training for some of these occupations does not adapt itself to a cooperative work experience program on the high school level as outlined in this Handbook. It is realized that other types of programs, at both the high school and post high school level, may be developed, for the purpose of offering training in agricultural occupations.

SECTION II

ADVANTAGES OF THE AGRICULTURAL OCCUPATIONS PROGRAM

To The Student

1. Provides an opportunity to become trained for a payroll occupation while completing the requirements for a high school diploma.
2. Helps in the choice of occupations in agriculture other than farming.
3. Arouses the student's interest in the field of agriculture.
4. Provides supervised training on the job under actual working conditions.
5. Provides an opportunity for student to make an intelligent choice of his life's work.
6. Lends encouragement to stay in school until graduation.
7. Provides opportunity to receive individual instruction in the chosen field of interest at a relatively low cost.
8. Develops definite work habits, attitudes, and responsibilities.
9. Offers opportunity to learn the technical information of a trade as well as the manipulative skills.
10. Provides opportunity to realize the necessity of cooperation with others.
11. Provides a foundation for post-high school studies.
12. Provides opportunity to establish a reputation on the job through experience.
13. Motivates interest in other school subjects.

To The School

1. Helps meet the mtraining needs of the community without over-training in any one trade or occupation.
2. Provides a terminal course for students who do not continue their education beyond high school.

3. Increases community interest in school activities.

4. Promotes good public relations between the school and community.

5. Offers a program for a school to place its graduates in payroll occupations.

6. Provides opportunity for the school to cooperate in other fields of agriculture.

7. Lessens the disciplinary problems at the school and the drop out problem.

8. Provides opportunity for school to share in decreasing the number of unemployed.

9. Provides a qualified staff member to assist in vocational guidance work. Helps in the establishment of out of school classes.

To The Employer

1. Provides opportunity to increase the interest of young people in the field of agriculture in which the employer is established.

2. Employers have an opportunity to have direct contribution to the school program.

3. Provides a selection of future employees who are interested and qualified for the field in which the employer is engaged.

4. Trainees may be able to take over when key men are sick, on vacation, etc.

5. A better trained employee is available.

6. Trainee efficiency and alertness is maintained and increased through the counsel and cooperation of the Agricultural Occupations teacher-coordinator.

7. Helps reduce training problems and expenses.

8. Increases efficiency of regular employees.

9. Offers opportunity to participate in an educational enterprise.

10. Enables employer to receive more direct returns from school tax dollars.

To The Community

1. Encourages young people to remain in the community after graduation.
2. Improves economy by providing additional income to the citizens of the community.
3. Helps to improve citizenship in the community.
4. Lessens the unemployment problem.
5. Promotes closer cooperation between the school and community.

Summary

The advantages that have been suggested probably do not include all that might possibly come as a result of this program. This is not to imply that each one listed would be an advantage in each school and community. Since each student, training center, school and community may differ due to the nature of the agriculture occupations program offered, it is natural to assume that the particular advantages to those concerned will also differ.

SECTION III

PROCEDURE FOR ORGANIZING AN AGRICULTURAL OCCUPATIONS PROGRAM

The following steps are suggested as an orderly means of inaugurating a new program of agricultural occupations. It is recognized that conditions will vary in each location and that it may be desirable to follow a different sequence of events than that found in the following list. Only under unusual conditions, however, should any one of the steps be eliminated.

1. The vocational agriculture instructor and appropriate school administrators (including the superintendent) should discuss the program and agree that one or more of the following steps of the organizational procedure should be carried out.

2. A local survey should be made to determine the number and kinds of businesses or firms in the field of agriculture that are in the community. A suggested procedure to assist in this step may be found in Section IV.

3. The vocational agriculture instructor should make a preliminary survey of the high school student body to determine the number of prospective students. See Section IX.

4. The Vocational Agriculture Division of the State Board for Vocational Education should be contacted for any assistance they may be able to offer.

   A member of the State Staff will meet with the local school officials to explain the states reimbursement policies and standards and provide any other available services which the local school may desire.

5. An advisory council should be appointed. See Section V for suggested procedure.

6. The public should be informed. See Section VI for suggested procedure.

7. The school should develop and adopt a policy statement which will serve as an operational guide for the administration of the agricultural occupations program. See Section VII for suggestions.

8. Arrangements for the necessary facilities and equipment should be made. See Section VIII.

9. Trainees should be selected. See Section IX for suggested procedure.

10. Training centers should be selected. See Section X for suggested procedure.

11. Trainees should be placed in training centers. See Section VIII for suggested procedure.

12. The training plan should be developed. See suggested procedure in Section XI.

13. The necessary forms and certificates should be completed.

14. The necessary reference and instructional materials needed should be purchased or secured. See Section XII.

15. Arrangements should be made with the school administration concerning class schedules, travel allowance, and other factors so that an adequate job of coordination can be accomplished. See Section XIII.

16. The program should be evaluated. See Section XV.

SECTION IV

SURVEY OF THE COMMUNITY

One of the first things to complete in the inauguration of an agricultural occupations program is a survey of the community. The purpose of this preliminary survey is to determine the total number and kinds of agricultural businesses in the community which may serve as possible training centers. This survey will also give an indication of the possibilities for placement of the students upon graduation.

Most vocational agriculture instructors are familiar with the community in which they are located so they can list most of the agricultural businesses. However, in the larger communities it would be impossible to list all the agricultural businesses or firms without assistance. There are numerous ways to get assistance in locating all these businesses or firms. Most of them will be listed in the yellow pages of the telephone book. A directory to the yellow page titles related to agriculture is found on the following page. Other sources such as the local Chamber of Commerce, local labor office, civic clubs and other professional organizations will also be a valuable help in making the list complete.

TELEPHONE DIRECTORY YELLOW PAGES TITLES RELATING TO AGRICULTURE

- Accountants
- Adjusters
- Advertising Agencies
- Agricultural Chemicals
- Ammonia
- Appraisers
- Associations
- Auctioning
- Bacteriologists
- Banks
- Beans
- Blacksmiths
- Bookkeeping Service
- Canners
- Dairies
- Engineers (soil)
- Electric Light and Power
- Farm Equipment
- Fertilizers
- Florists
- Flour Mills
- Food Processing
- Frozen Foods
- Garden Equipment
- Gardners
- Golf Courses
- Government
- Grain
- Hatcheries
- Horses
- Insecticide
- Insurance-Agriculture
- Irrigation Companies
- Landscape Gardners and Contractors
- Lawn Mowers
- Livestock Breeders, Feeders, Hauling
- Publication, Research Supplies
- Meat
- Meat Packers
- Milk
- Milking Equipment and Supplies
- Newspaper
- Produce - Brokers, Shippers, Wholesale
- Property Management
- Pumps
- Radio
- Real Estate

- Railroads
- Resorts
- Schools
- Spraying Equipment and Supplies
- Spraying Horticulture
- Tree Service
- Veterinarians
- Wool

The above titles may not include all firms, businesses and companies in your community having positions in which employees need competencies in agriculture.

SECTION V

THE ADVISORY COUNCIL

A local advisory council can be of much assistance in the development and operation of an Agricultural Occupations Program. The council provides a link between the school and community through which their activities may be coordinated. The function of the advisory council is to advise and counsel the school in improving the vocational program.

In every community the needs and objectives of the Agricultural Occupations Program will vary. It is the purpose of the advisory council to assist in guiding the Agricultural Occupations Program so that it will meet the local needs.

PURPOSES OF A VOCATIONAL AGRICULTURE ADVISORY COUNCIL

1. To secure ideas and advise of representative key people in agricultural businesses and industries in the school district.
2. To study community situations and determine community needs.
3. To clarify the relationship of the vocational agriculture department with the community.
4. To explain the Vocational Agricultural Program to the public and help improve public relations.
5. To correct the teacher's "blind Spots", give him encouragement and support, and also help him meet and work with those whom he needs to know.
6. To help evaluate the work of the vocational agriculture department.

ADVANTAGES OF AN ADVISORY COUNCIL

1. Provides a link between the school and community.
2. Gives prestige to the school, community and vocational program.
3. Gives the school an opportunity to explain the objectives of the educational program.

4. Brings about a closer relationship between management and labor.

5. Provides an opportunity to study the real training needs in the community.

6. Provides a sounding board for new ideas.

FUNCTIONS OF AN ADVISORY COMMITTEE

1. Assists in the selection of training centers.
2. Renders service in developing employment opportunities.
3. Assists in setting standards for trainee selection.
4. Gives advice on the development of instructional material.
5. Assists in the selection of classroom equipment.
6. Provides guidance in wage and hour problems.
7. Helps publicize the program.
8. Gives advice on the selection of references and other instructional aids.
9. Assists in the organiaation and promotion of adult classes and in the securing of qualified adult instructors.
10. Assists in setting local training standards.
11. Renders assistance in conducting the community survey.
12. Assists in the selection of subjects, course content, and special emphasis that should be included in the training plan.

QUALIFICATIONS OF COUNCIL MEMBERS

1. Members should be a well-known leaders in their particular business.

2. They should express an interest in the problems of the school system.

3. They should be representative of the general opinion of: management, labor, agriculture, and the public.

4. They should have the necessary time to devote to council work.

5. They should not be persons who will exploit the council for their own personal benefit.

SIZE OF COUNCIL

1. A good working council should consist of approximately five to nine members.

ORGANIZATION

1. The local board of education should authorize the superintendent of the school, the principal or the teacher-coordinator to organize an advisory council..

2. The local Chamber of Commerce, service clubs and other organizations may recommend several of their members to serve on the council.

3. The teacher-coordinator should participate in all meetings.

4. The superintendent or principal should be an ex-officio member of the council.

5. The council should select the chairman from its membership. The teacher-coordinator has a relationship to the committee similar to that of the superintendent of the school board.

HOW TO APPOINT

1. The first step is to make a list of the persons whom you would consider for appointment.

2. Involve the Superintendent of Schools and the school board. Go over the list of prospects and ask them to assist you in making the selections.

3. The Superintendent can then send out a letter explaining the purpose of the council to those selected to serve. He can also give the time and place of the first meeting.

4. Shortly after the letters have been received, it would be advisable to visit and briefly explain the purpose of the council, and at the same time remind the members of the first meeting date. Many times it may be advisable to contact prospective members and determine if they are willing to seve before presenting their names to the school board for approval.

TERM OF APPOINTMENT

1. It is preferable to have a regular election system to replace members. In this way a member who has shown no desire to cooperate or make contributions to the council can be replaced.

2. Rotating the terms of office has the distinct advantage of bringing new members into the council who will provide new ideas and enthusiasm.

3. Not all replacements should be made at one time. It is far better to stagger the replacements so that there is always an experienced member on the council. Members should be appointed for a definite term, usually from one to three years.

WORKING WITH THE ADVISORY COUNCILS

In working with advisory councils, you will find it practical to keep certain guiding principles and methods in mind for a successful council and they are as follows:

1. The members serve on a voluntary basis, therefore, they should not be expected to carry out long, detailed work assignments.

2. School officials should acquaint council members with the total vocational offerings of the school.

3. Informational material should be put into the hands of council members. This material should include pertinent releases and publications of the local Board of Education, State Board for Vocational Education, and the U. S. Office of Education.

4. Meetings should be scheduled regularly. Some councils adopt a policy whereby at the request of school authorities, chairman of the council, or any three members of the committee, special meetings may be called.

5. If possible, council meetings should be conducted in the same building in which the training program is held.

6. Councils working with new programs should meet at least once a month during the first year the program is in operation or until such time as the program is operating smoothly.

7. The director of the vocational department of the local school system should be in attendance at all meetings.

8. The teacher-coordinator should be present at all meetings.
9. Complete information on the financing of the agricultural occupations program should be given to all members.
10. All members should be advised on existing and pending vocational legislation.
11. Copies of minutes of meetings should be given to all council members. School officials should have a complete file of minutes of council meetings.
12. A constitution and by-laws should be developed by the council.

EXAMPLE OF AN AGENDA OF THE FIRST MEETING OF AN AGRICULTURAL OCCUPATIONS ADVISORY COUNCIL

1. Introduction of all members
2. Appointment of a temporary chairman
3. Election of a permanent chairman
4. Election of a secretary. (Local teacher-coordinator may be available to serve)
5. Explanation of Agricultural Occupations Program and the need for an advisory council.
6. Functions of the advisory council.
7. Responsibility of the advisory council.
8. Term of appointment
9. Selection of time and place of meetings
10. Business

ITEMS ON THE AGENDA SHOULD MEET MOST, IF NOT ALL, OF THE FOLLOWING TESTS:

Is this a real problem?
Is this a problem which the school earnestly desires to solve?
Will the school use the council's recommendations?
Is this a question one in which the committee is interested or one in which it can become interested?
Is the committee competent to discuss and make recommendations on this type of problem?
Do members have sufficient knowledge of facts and background information to make worthwhile suggestions?

PITFALLS TO AVOID IN WORKING WITH ADVISORY COUNCILS

The skill with which the organization and work of the advisory council is managed by local school authorities will, in a large measure, determine the benefits that may be derived from their use. In this connection, it may be well to keep in mind possible pitfalls that may be encountered.

School authorities _should not_:

1. Permit the council to beome administrative in its function.
2. Conceal facts pertaining to a program from the members.
3. Enter into labor-management controversies.
4. Fail to keep a copy of minutes of each meeting on file.
5. Take action within the realm of the council's advisory function without first consulting with the council.
6. Fail to recognize the value of the advisory council through news releases and other means.

SECTION VI

INFORMING THE PUBLIC

The dissemination of publicity regarding the agricultural occupations program is as much a part of the teacher-coordinators job as selecting training stations, counseling with students and teaching related material. Good publicity arouses interest and secures the cooperation of the public in helping make the program a success.

The first phase of publicity with which the teacher-coordinator will deal is that of advertising and promoting the program. School personnel, students, parents and businessmen must understand the objectives, advantages and operation of the program and the teacher-coordinator is the logical person to supply this information. After the program is in operation, he should also keep the public informed so that their interest and cooperation is kept at its maximum.

It is recommended that the agricultural occupations teacher-coordinator use all the news media available in order to reach the maximum number of people. This would include radio, television, newspapers, school publications, personal letters, assembly programs, talks and speeches, exhibits, banquets and perhaps many others.

All teacher-coordinators should make use of the one or more newspapers, radio or televisions stations, which serve their area. Several times during the year the teacher-coordinator should release announcements, news items and interest stories about his classes. In most cases the original copy will have to be prepared by the coordinator. After the copy has been prepared it should be shown to the proper administrative personnel for their approval. The following suggestions are intended to assist him in preparing publicity copy.

1. Articles are of two types: news stories and feature stories. The feature story differs from the news story in that it usually emphasizes the "human interest" element. Both types of articles are necessary to properly publicize school activities.

2. Both types of stories on vocational programs should be factual. The facts should speak for themselves and the writer should never attempt to "color" the story by injecting his own opinions.

3. The teacher-coordinator feels that his article requires a certain amount of "editorializing", he should make sure that the comments come from some person of authority other than himself, and he should use "quotes" in all cases. For example, the following statement in a newspaper article has far more weight than any number of editorial comments made by the coordinator: "In discussing cooperative training before the Businessmen's Luncheon Club, Superintendent Brown said, "'We feel that this program does much to bridge the wide gap that separates the school and business and industry.'"

4. A good news story seldom starts at the beginning and works toward the climax as is done in fiction writing. The opening paragraph is the most important and should contain the gist of the story.

5. The opening sentence -- or at least the first paragraph -- should answer the following questions: Why? What? When? Where? Why?

6. Sentences, paragraphs, and even words must be short for easy reading or listening.

7. Use action verbs. The active voice is more forceful than the passive voice. "Graduates receive training certificates" is better than "training certificates are received by graduates".

8. There should be a "follow-up" story for most news items released about the vocational program. The announcement that the school has inaugurated on Agricultural Occupations training program should be followed within a reasonable length of time by a story on enrollment, placements, and other data about the program. Likewise, such an item as the "Agricultural Occupations Students Plan Employer Banquet" should be followed by "Students Honor Employers at Banquet" when the function takes place.

9. Too much publicity is worse than none at all. Avoid the use of "Ballyhoo" and publicity stunts. Do not mislead the public into expecting more of your program than can possibly be accomplished.

10. Clear all publicity releases through the proper channels. Learn the school policy regarding publicity and adhere to it.

11. Miscellaneous suggestions on preparing copy:
    Use a typewriter
    Double space
    Do not write the headlines
    Indicate who prepared the copy -- it will assist the editors.

In addition to news announcements and stories of a timely nature, there are many subjects for stories which may be used at various times throughout the school year and which may be classed roughly as feature stories. This type of article is much more difficult to compose than "spot" news and should not be attempted by the teacher-coordinator unless he possesses an ability to write and has had experience in this type of writing. However, material on suitable subject matter may be prepared by him to be rewritten by a staff writer.

Some suggested subjects for feature stories that may be used at various times are:

1. Series of trainee interviews, including photographs of the trainee at work.
2. Employers' views on agricultural occupations training.
3. Unusual or outstanding training situations.
4. Guidance values of agricultural occupations training.
5. Annual training certificates awarded.
6. Trainee views and reactions on working in industry.
7. Objectives and activities of the F.F.A.
8. "Should Work Experience be a High School Requirement?"
9. How agricultural occupations trainees invest their money.
10. Interesting follow-up data.
11. Presentation of recognition certificates to training centers.

By and large, news media are anxious to obtain copy on such subjects as those listed above and usually have at least one staff member who specializes in this type of writing. The public is interested in its schools and enjoys reading or hearing about them, especially if the stories contain a liberal sprinkling of familiar names and places, and describe the achievements of the youth of the community.

Following are skeleton news stories which present examples of how stories may be constructed. These should be adapted to local conditions and may in some instances have to be completely changed to meet the local situation.

Agricultural Occupations Program
Mr. John Doe
Vocational Agriculture Instructor
Union High School

FOR IMMEDIATE RELEASE:

Introductory Article

A new on-the-job training program for high school students will be launched this fall at ____________________ High School, according to ____________________ ____________________, Superintendent of Schools.

An "Agricultural Occupations" curriculum has been developed by ____, Agricultural Occupations Teacher-Coordinator. This program will give students an opportunity to spend part of their school time in on-the-job training with local agricultural business and industrial firms.

Trainees enrolled will enroll in regular high school courses, including one period of related instruction, during which time they will study information related to their particular on-the-job training. They will spend three hours each weekday on the job, learning the skills and management practices involved, under the guidance of a skilled instructor selected from the firm in which the trainee is working.

The Agricultural Occupations program is designed to offer training to all high school students who have an interest in an agricultural occupation. Such training can lead to in-school employment and immediate employment after completion of their high school program.

A survey recently conducted indicated there are ______________ (number) ag-related businesses in the ______________ (town) area. ______________ (number) of these have indicated an interest in taking a student trainee. The Agricultural Occupations Program was provided for by the Vocational Education Act of 1963.

Advisory Council

A picture of the council members is recommended here

Nine area leaders in business, education, and agriculture named to the ____________High School Vocational Agricultural Occupations Advisory Council (pictures above L to R) were:

____________, ______________________________.
(name) (occupation or business name)

________, ________; ________, ________; ________, ________;

________, ________: ________, ________; ________, ________;

________, ________; and________, ________; local________, ________;

These men will advise Mr.____________ ____________,
Vo-Ag instructor and Agricultural Occupations Teacher-Coordinator in the organization, operation, selection of trainees and other phases of the one-the-job training program. They were approved by the ________School Board at its meeting________evening, and will serve from one to three
(day)
year terms.

Picture of Trainee on the Job

____________ ____________Student Trainee, above left, performs a part of his job as______________________.
(job or position)

____________, on-the-job instructor, supervises.
(name)

____________is one of the trainees from the ____________
(boy's first name) (school)

High School Agricultural Occupations class. He and his classmates spend 1/2 of the school day in regular academic class study, including instruction pertaining to their specific work, and 3 hours/day at the training center.________ ____________, Vo-Ag instructor at
(name)

____________High School, is coordinator of the program.

An excellent way to publicize the program is by presenting talks to civic clubs and other groups. This enable the public to get personally acquainted with the teacher-coordinator and it also give the teacher-coordinator a chance to answer questions which may evolve from the group. The teacher-coordinator should be prepared to present a talk concerning the program whenever the occasion arises. Most groups are happy to have representatives of the school speak to them concerning educational problems in the community.

In order to do this job adequately, the presentation should be well organized and prepared. Charts, graphs and figures should be incorporated into the presentation to help illustrate and carry the program to its conclusion. Vary the program and presentation to fit the group.

Following is a sample outline of a speech that could be presented to civic groups etc. This again is presented as a sample and should be adapted to the local situation.

I. Introduction

  a. My relationship to school, position, etc.
  b. Statement about education in Colorado

II. Status of High School Students

  a. Enrollment in various programs in school
  b. Enrollment in our school, state programs, etc.
  c. College-bound students
  d. Drop-outs in Colorado and our town
  e. What are we doing for these students?

III. Explanation of Program Under the New Provisions of the 1963 Law

  a. Type of program
  b. Objectives of the program
  c. Explanation of how the program operates

IV. Possibilities of the Program in Our Community

  a. Job opportunities in the community
  b. The number of Ag-related businesses in the area
  c. Number of possible training centers
  d. Cost of such a program
  e. Additional facilities needed for such a program

V. Explain the Values of the Program

   a. To the community
   b. To the school
   c. For the employer and,
   d. Most of all to the student.

VI. Ask for their Support and Cooperation in Setting up an Agricultural Occupations Program in our Community

VII. Summary

VIII. Question Period

The following is an example of a speech that a vocational agriculture instructor could present to a civic club to promote an agricultural occupations program.

As I scanned this morning's edition of the Rocky Mountain News and noted the crimes of violence committed by young people, I had the sobering thought that one day youth shall inherit our world. Then I remembered, once I was a youth. Could it be that I haven't labored to leave a proper inheritance? But living in perilous times is not a new experience for citizens of our great country. Beginning with the shot heard round the world, we have been engaged in a major conflict about every twenty years. This interval of time is shortened somewhat after the termination of world war II by the Korean conflict and our present activity in South East Asia. The cold war with the communists seems to be with us like the common cold.

In my estimation, there is an internal peril far greater than any threat from the communists. I refer to those millions of young people who are entering our country's labor force inadequately prepared to meet the needs of a society which demands highly skilled performance from its labor personnel.

I refer you to an article in Readers Digest of July, 1964 written by Lester Velie, titled, "Let's Stop Producing Unemployables," in which educators take another blow on the chin for failing to meet the needs of our youth. Let it be known that we in education hold fast to the belief that education is our salvation, indeed the improvement of the intellect may well be the reason for man's existence on earth. We accept the challenge to do a better job, to take on additional responsibilities of the home and other agencies in the community in order to leave a proper heritage.

Let us look at the present program of vocational agriculture in our school. We have a good record in this school and most of you are familiar with it. It compares favorably with the total picture in the state of Colorado as to the employment of our youth. Let us look for a minute at the occupational status of 1958 vocational agriculture graduates in Colorado. (Chart) You will note 19.1 per cent of the graduates were in related occupations requiring mechanical skills such as carpentry, welding, etc. 14.3 per cent are in off-farm agriculture occupations such as marketing livestock, managing feedlots,----yet the greatest number, 47.1 per cent, are in production agriculture. It was found that only 19.5 per cent were employed in jobs needing no agricultural background. The most significant finding of this study points out that none of these boys available for employment were unemployed. If we combine all of these boys needing knowledge in agriculture we will find 80.5 per cent benefited directly from their training in vocational agriculture.

The findings of this study would indicate that vocational agriculture is doing its share to meet the challenge of jobless youth. The fact that none of these youths are unemployed has great significance, when reviewed in the light of the national unemployment rate of one in every six for this age group.

There are several questions which I would propose: "hom have we served?" and "Whom can we serve in the future?"

We have served in-school youth preparing to farm and enter agriculturally related occupations. Also we have served the young farmer out of school employed as a farm worker and looking forward to full establishment as an independent farm operator. Last, but not least, we have served adult farmers fully established as operators either as owners or tenants.

Before answering the question, "Whom can we serve in the future?", let us look at some important information as to enrollment in school and major occupational groups in our labor force. Consider first the national enrollment by categories in 1960. (Chart) This shows each of the vocational education courses and the per cent of students enrolled in each. Note: the vocational educations combined reaches only 13 per cent of the youth in our nation. How does Colorado compare in this? Let us see. (Chart) Again the same breakdown shows even less of our youth being trained for a vocation, 9.1 per cent. If we analyze this completely we see too many of our youth are destined toward college preparatory courses. Certainly we all realize that 90 per cent of our students will not, and are not college bound.

Take for instance our school children entering the first grade. What becomes of these students as they progress through their education? (Chart) As first graders we have what we will consider 100 per cent but by the time these students reach the 9th grade only 78.3 per cent remain. We lost even more by graduation time when only 70.7 per cent of the original 100 per cent complete 12 years of school. What happens to this approximate 70 per cent? Some will go to work; others become wives and mothers; but only four in 10 or 40 per cent will continue their education.

Let us continue with these four youths and see what takes place in college. Suppose for ease of mathematics that these four students represent 100 per cent entering college. (Chart) The second year 73 per cent return, the third year 56 per cent return and finally 55 per eent graduate. How many of the original 100 per cent first graders received a complete college education---only 20 per cent. What about the other 80 per cent? What are we doing for them? In Colorado, you will recall, we offer training in some field of vocational education, for only 9 per cent of our students. We must increase and improve our vocational programs to reach as many as possible of the other 71 per cent.

Before we indulge in the task of providing vocational education for the 71 per cent, we should consider what occupations are now available and what will be available in the next en or more years. Permit me to start back in 1900 so you can see the change in our occupational groups. (Chart) Farm workers were the largest single force in 1900 with 38 per cent of the total, followed closely by blue collar workers comprising 36 per cent. (Blue collar workers meaning craftsmen, semiskilled, and laborers). Professional, clerical, sales and service made up the other 16 per cent of the total labor force.

By 1960 we had a radical change in occupational groups. (Chart) Farming had decreased from 38 per cent to only 8 per cent with more jobs available to professional and clerical workers. Blue collar workers remained about the same. This was a reduction of approximately 30 per cent. This in itself is not bad, rather an indication that more progress was made in farming than any other area.

What about our future? (Chart) A projected view into 1975 shows more reduction in the precentage of farming and blue collar workers. This will be the challenge, to train and retrain the labor force in our country. This is not the total picture as a labor force in agriculture. I pointed out only 8 per cent of our labor is in production agriculture, but I neglected to mention that 10 per cent of the labor force is in agriculture services such as machinery, chemicals, fertilizers and many others; while 17 per cent are in agriculture processing and distribution. This means approximately 35 per cent of our labor force is engaged in agriculture or agribusiness. A vocational agricultural background would be very beneficial to these workers. To quote Mr. Robert J. Eggert, Marketing Research Manager for Ford Motor Company, "Much has been said about the demise of agriculture as a vocation with a future. Fortunately, much more has been said about agriculture as a dynamic, growing industry with a tremendous future for those who work for it. You have heard much about the "new" agriculture---or agricbusiness---in the concept that goes beyond farming itself to include all those professions which serve and supply the farmer and who market his products."

Now to answer the second question I posed earlier, "Who can we serve in the future?" First I shall say there will be funds available for the addition and operation of expanded programs in vocational education. I hasten to add, just how much funds we do not know, as congress has not made final appropriations as yet, but we feel it will be a substantial amount. Your administration and I feel we can best meet the needs of our youth in the the community by incorporating a cooperative work experience program along with our regular vocational agriculture program. What is a cooperative work experience program in vocational education? We can say it is a program where businesses and schools can work together in the training of students for a specific occupation. The trainees receive related instruction at the school and work part of the school day in a business or industrial establishment to receive specific on-the-job training in an occupation they would like to follow. Some advantages of this program are: it broadens existing vocational educational programs; it provides more and better training in a variety of occupations; it helps reduce the school dropout problem, and aids in decreasing unemployment in the nation. (Charts) By varying the program somewhat, it can be operated in either small or large communities. Cooperative work experience programs are in operation in all kinds of school administrative units, from the comprehensive central schools in rural areas, to the specialized vocational schools in metropolitan centers. The Vocational Teacher-Coordinator in the school is the person who is in charge of the program. He offers the related instruction to the student and coordinates the on the job instruction. The worker or businessman, who is experienced and trained in his work, gives the students on-the-job instruction. Students are selected for the best occupational area on the basis of screening and testing procedures. The student usually receives at least the minimum hourly wage for his work on the job. In most instances, students must work at least fifteen hours per week, part of which must be done during the school day. There is also a limit set on the total number of hours that they can work in a week. So there will be no interference with other school subjects and activities.

The cost of such a program is shared by the local community with reimbursement from the State and Federal funds administered by the State Board for Vocational Education. As I stated before, the amount of reimbursement is not known at present, but the new Vocational Education Act of 1963 provides for additional funds to operate a program such as this.

Since I am working in vocational agriculture, we will consider the need for a cooperative work experience program in this field. Through the Vocational Education Act of 1963, we can expand the vocational agricultural program and offer training in agricultural related fields. We realize that all farm boys can not or will not farm, but as stated before these same boys have many opportunities awaiting them in agriculturally related occupations. I have made a survey in our community, and located about one hundred and twenty five businesses that have employees who work in agriculturally related occupations. There are one or more persons per business. Most of the businesses and industries that have these positions, prefer to hire people with an agricultural background. This new type of program, referred to as an agricultural occupations program, should also help reduce unemployment in the area by having more trained people for employment. The program should reduce school drop-outs by giving students a more practical approach to their school work.

Now we shall consider some of the values of the agricultural occupations program. First of all to the student: The student can learn skills under actual working conditions; it develops appreciation and respect for work as wage earners; it aids in obtaining jobs; interest in the classroom is increased through the application of skills on the job; and the ability to get and hold a job helps the young person adjust to the adult world. Some of the values to the school are: The school can provide vocational training with a minimum expense for shop and laboratory equipment; the skills and knowledge of individuals outside of the school can be utilized; teachers can keep in touch with changing employment conditions, it helps demonstrate to the public that education is a community-wide responsibility; and students are more likely to stay in school because it makes their school work more "practical" and "meaningful".

Some of the values to business and industry are: The schools' screening and testing service helps employers obtain more qualified trainees; employers are assisted in analyzing jobs and making up training outlines.

It provides an opportunity for them to participate in a community service. Local people are trained for local work--in the employer's way.

The values to the community are that local students gain the skills and civic competence needed to help keep them employed within the community; school-community relationships are increased, it helps reduce the poorly-trained and maladjusted young people who might otherwise become a burden to the community.

In conclusion, I have tried to explain the need and value of a Cooperative work experience program in agriculture. Now I would like to ask your cooperation in support of the program by explaining and talking about it with members of other clubs and organizations, the school administration, school board members, people in business and industry, and other people in the community. If any of these people want to know more about the program, have them contact me. Thank you!

SUGGESTED SCHEDULE FOR RELEASING PUBLICITY

Needless to say, the teacher-coordinator should plan his publicity campaign and not conduct it in a haphazard manner. Planning includes timing, which is one of the most essential elements in an effective publicity campaign. Following is a suggested schedule which a coordinator may use in making plans for publicizing his program. Of course, he may not (and probably should not) use all the media listed. He should, however, give consideration to several of the most feasible publicity activities for his particular community and plan them far enough in advance to allow himself sufficient time to carry them out in a creditable manner. A suggested schedule is found below.

MDEIA OF PUBLICITY	Before opening of school	At opening of school	During each semester	Once during year	At end of school
Newspaper announcements	X	X			
Newspaper features			X		
School publications			X		
School assembly programs				X	
Talks to civic clubs and other groups	X		X		
F.F.A. Activities	X		X		
Talk to Parent-Teachers Assoc.				X	
School exhibits and projects		X	X		
School placards and posters			X		
School public address system		X	X		
Employers' newspaper "ads"				X	
Free radio and television time	X		X		
Section in school yearbook				X	
Letters to students and parents	X				
Employer-employee banquet				X	
Letters of appreciation to employers and parents					X
Recognition certificates				X	

SECTION VII

POLICIES FOR THE AGRICULTURAL OCCUPATIONS PROGRAM

STUDENTS

1. Age

The trainee must be 16 years of age or older to meet the requirements of labor laws. Trainees who will be 16 during the first 6 weeks after the beginning of school may be enrolled. They can not, however, be employed under a student-learner certificate until they are 16 years of age.

2. Hours of Training

Trainees employed in occupations governed by the U. S. Fair Labor Standards Act may spend as many hours at the training center as approved, provided these hours, plus the hours spent in regular classes in school do not exceed 40 hours per week. Sufficient time in training on the job is needed for instruction, observation, and practice to learn the various phases of the job. Normally, the trainees will spend five hours per day in school and three hours per day at the training center. When school is not in session on any school day, the trainee may work more hours than the student-learner's certificate authorizes, provided, however, the total hours shall not exceed eight hours per day. During the school term when school is not in session the entire week, the trainee may work additional hours, not to exceed 40 hours.

Trainees employed in occupations which do not fall under the jurisdiction of the U. S. Fair Labor Standards Act will be governed by the Colorado Child Labor Laws - See the appendix for a summary of the Colorado and U. S. Labor Laws.

3. Selection

Trainees should be selected who are interested in preparing for occupations which require knowledge and skills in agriculture. Trainees must be employable, therefore it is essential that selection be based on a carefully designed procedure which takes into consideration such things as aptitude, interest, personality, work habits, etc. See Section IX for procedures and forms to use in selecting trainees.

4. Wages

Trainees must be paid for the time spent on the job at the training center at the same rate as other employees of the same age or experience. The local Advisory Council may recommend minimums if not covered by minimum wage laws. Employers may obtain a Student-Learner Certificate allowing them to pay 75 per cent of the minimum wage for a portion of the training period. See the appendix for more information concerning Student-Learners Certificates.

5. Length of Employment

Trainees must be employed in a training center for at least six months and a minimum of 250 hours during any one year. Trainees should be employed no later than six weeks after the opening of school.

6. Travel

The trainee must be responsible for his own travel to and from the training center. Any training center approved should be within a reasonable travel distance from the school and the home of the trainee in order to reduce the amount of travel required.

7. Individual Training Plan

An individual training plan must be developed for each trainee. Both a course-of-study for his classroom related instruction and a training outline for his occupational on-the-job training at the training center is necessary.

8. F.F.A.

Boys enrolled in the agricultural occupations program are eligible for membership in the Future Farmers of America.

RELATED CLASS ROOM INSTRUCTION IN AGRICULTURAL OCCUPATIONS

1. Length of time

A minimum of one hour (55 minutes in the clear) per day for related classroom instruction is required.

2. Course of Study

a. Instruction applicable to all agricultural occupations regardless of occupation pursued, will be provided. Such instruction will include such areas as:

(1) Applying for a job
(2) Employer relations
(3) Ethics
(4) Labor laws
(5) Workmen's compensation laws
(6) Social Security
(7) Other

b. Instruction will also be provided which is applicable to the individual trainees occupation in which he is engaged. This instruction will be primarily individual study under the supervision of the agricultural occupations teacher-coordinator.

3. Size of classes

It is suggested that the maximum enrollment for one full-time teacher-coordinator will not exceed 40 students - no more than 20 students should be in any one class.

4. Facilities and Instructional Material

a. The school must provide satisfactory classroom facilities for this program. In most cases, the vocational agriculture department will be adaptable to provide the necessary facilities.

b. The school must also be responsible for providing sufficient instructional materials for the students.

ON-THE-JOB TRAINING AT THE TRAINING CENTER

1. The length of training period will vary, according to the type of occupation and offerings of the Training Center.

2. The amount of time spent at the center can not exceed the difference between the total hours in school and 40 hours per week.

3. The minimum length of the training period will be at least six months with a minimum of 250 hours spent working in the Training Center.

TRAINING PLAN

1. The Training Plan should be developed cooperatively by the person directly responsible for training the student and the agricultural occupations teacher-coordinator.

2. The Training Plan should contain the basic knowledge, manipulative skills, and abilities that the trainee should learn on the job and in the classroom.

SUPERVISION OF TRAINEES AT THE TRAINING CENTER

1. By the employer

The employer, or a person designated by the employer, will be responsible for training the student at his place of business. He should assist in the developing the training plan in order that no step, job, operation or procedure is omitted. He is to provide instruction at the center in such a manner or method that will be understandable to the trainee.

2. By the Agricultural Occupations Teacher-Coordinator

The primary role of the teacher-coordinator will be to work closely with the employer and/or the person directly responsible for training the student. He will make periodic visits to the training center to check with the business personnel and observe the student in training. The local school district should provide ample time and travel allowances for the coordination of the program.

SECTION VIII

FACILITIES AND EQUIPMENT

One of the advantages of the agricultural occupations program is that it provides specific instruction in a variety of occupations without excess cost to the school for facilities and equipment. In most schools where a vocational agriculture program is being conducted the regular vocational agriculture classroom can be used for offering the related instruction. Much of the teaching equipment used in the regular vocational agriculture program can also be used in the teaching of the related instruction in agricultural occupations.

However, since many new areas of instruction will be covered in this program, it will be necessary to provide additional equipment for these areas.

The following is a brief summary of the facilities and equipment needed to begin an agricultural occupations training program.

1. A classroom of adequate size to accommodate the largest class related instruction in agricultural occupations should be provided. The minimum size should be 900 sq. ft. with a minimum width of 28 feet to provide for conference desk arrangements.

The class room should also meet the following criteria.

a. Windows should be as near the ceiling as practical. Provisions should be made to blackout for projection purposes.

b. The floor should be resilient, light colored, durable, skid resistent, easily cleaned, and insulate the noise of footsteps.

c. Chalkboard, bulletin boards, bookcases, magazine racks, study tables, filing cabinets, projection screen, etc., should be provided. At least 16 running feet of chalkboard space should be supplied. It is desirable to have the center panel a combination chalkboard-magnetic board. An accoustically treated ceiling is desirable.

d. A heating unit that is quiet in operation is preferred to one with a fan. All motor-driven heating units with fans should be outside the classroom, and the heat brought into the room through suitable ducts.

e. A storage room off the classroom is necessary for storage and preservation of teaching materials. A 6' x 12' room should be adequate.

f. Water and gas service should be available for laboratory purposes. An instructors desk with an acid resistent top and sink is recommended.

g. Electrical convenience outlets should be installed for demonstrations and projection work at convenient points about the room. Outlets every 10' of wall perimeter is usually adequate, or the use of plug mold around the room is suggested. At least one 220 volt outlet should be located in the classroom for laboratory purposes.

h. Lighting should be checked with a light meter and adjusted to eliminate all eye strain. At least 35 foot candles or semi-direct diffused light is recommended.

i. Classroom tables, arranged, to permit conference procedures is desirable. These tables should be 22" wide, 5' long and 30" high with a hard finish of glare free material.

2. A separate office for the agricultural occupations teacher-coordinator should be provided and meet the following criteria.

a. The office should be located and constructed so as to give the instructor vision through windows into the classroom.

b. The room should be 80 to 120 square feet. It should be provided with a desk, conference table and filing cabinets. A small independent heating unit may be desirable so work can be done in the office even though the heat is low in the remaining parts of the building.

c. A telephone in the office is a must.

d. It should be equipped with a desk and filing cabinet that can be locked so confidential information may be kept here.

3. The agricultural occupations teacher-coordinator should have access to a 35 m.m. slide projector and a 16 m.m. sound projector. Some occupations may require additional equipment for training but in many instances this equipment is already part of the regular Vocational Agriculture department. A more detailed discussion of instructional aids and equipment can be found in Section XII.

SECTION IX

SELECTION OF TRAINEES

Much of the success of an agricultural occupations program depends upon the calibre of the students enrolled. Students of high calibre do not necessarily mean thase in the upper quartile, but refers to those students who possess the aptitude and qualifications required for success in a given occupation. The objectives of a program of this type can only be attained when the trainee enrolled is capable and desirous of receiving training. There is a tendency among some educators to gear a program of this type toward students with low academic and leadership ability while the training in many occupations requires students with desirable personal traits and above average aptitudes.

The following steps are suggested as a guide to follow in selecting high calibre trainees.

1. Make a general announcement concerning the program to all eligible students at least two months before the pre-registration for the next school year.

2. Have all interestedstudents fill out an "application for enrollment" form. See example at the end of this Section.

3. Make arrangements with the school counselor to obtain various test scores and other confidential information which will not be reported on the application form. Record this information plus the information taken from the "application for enrollment" form on The Student Information Sheet. See example at the end of this Section.

4. Review the "Student Information Sheets" to determine those students who meet the minimum qualifications.

5. Before a final selection is made, each student should be interviewed personally. This will help obtain information that has not been listed on the student information sheet.

6. After completing the preceding steps, sufficient information should be available to make the final selection of trainees. The following criteria should be kept in mind when selecting trainees:

    a. Select students who have a definite occupational objective.

b. Select students whose parents approve of their participation in the program.

c. Select students who have shown that they possess the ability and willingness to work.

d. Select students who will be at least 16 years old when the one-the-job training period begins.

e. Select students who posses leadership potential.

f. Select students who have done well in other subjects.

g. Select students who have maintained good school attendance records.

h. Select students who will be able to work the minimum required hours per week.

i. Select students who will be able to get to and from their Training Centers.

j. Select students who are interested in occupations in which adequate training centers are available.

k. Select students who do not possess any handicap which would prevent them from being hired by employers in the available training centers.

l. Select students who possess high moral character.

m. Select students who possess a basic knowledge and interest in agriculture.

APPLICATION FOR ENROLLMENT IN VOCATIONAL AGRICULTURAL OCCUPATIONS

Name____________________ Parent's or Guardian's Name ____________________

Address______________________________ Phone No.__________

Age ___ Sex ___ Height ___ Weight ___ Social Security No.__________

Location from School______________________________

Grade in School______ Do you plan to go to College ? Yes ___ No ___

List the high school credits you have earned in Math ___ English___ Social Science ___ Science ___ Agriculture ___ Commercial ___ Other___

Parents Occupations - Father __________ Mother __________

What type of curriculum are you enrolled in? College Prep ___ General ___ Vocational ___

What hobbies do you enjoy______________________________

List the Clubs and Organizations to which you belong_______________

____

Do you wear glasses? Yes ___ No ___ Will you have transportation to work? Yes___ No ___ Do you have any physical handicaps? Yes___ No ___ If the answer is "Yes" please explain____________________

List the name of employer and previous jobs you have held and the length of time spent on the job.

Name of Employer	Job	Number of Months

What occupations do you prefer to receive training? First Preference______

____________________ Second Preference____________________

What types of work do you dislike?______________________________

Will you be available for work: after school?______ on Saturdays?______

What subjects do you need to graduate?________ ________ ________

________ ________ ________ ________ ________

(Have your parents complete the following)

____________________ has my permission to participate in the agricultural occupations program.

Signed by Parent or Guardian____________________

STUDENT INFORMATION FOR AGRICULTURAL OCCUPATIONS

(To be completed by teacher-coordinator and kept in permanent record file)

Date

Name________________________Parent's Name____________________

Address________________________________Phone No.__________

Age ____ Sex ____ Height ______ Weight______Social Security No.______

Grade in school__________ Parent's occupation _ Father_______Mother_____

Location from school____________Plan to go to college Yes ____ No ____

Credits earned - Math____English____Social Science____ Science____Ag____
Commercial____ Other____

Type of program enrolled in - College prep ____ Vocational____ General____

Hobbies________________________Grade average______________

Days absent last year______ Transportation to work - Yes____ No ____

Clubs and Organization________________________________

Physical handicaps________________________Glasses?__________

Previous work experience and Name of Employer	Job	Months

Students Interests________________________________

Student Dislikes________________________________

Occupationsl Objective________________________________

I. Q. Tests (List each)________________________________

Other Tests	Test	Results

Parents approve of participation in Agricultural Occupations program? Yes__No__

Availability for work after school______________Saturdays__________

Subjects needed to graduate________________________________

Miscellaneous information________________________________

SECTION X

SELECTION OF TRAINING CENTERS

The selection of adequate training centers is an important key to successful training. The following steps are listed as a guide in the selection of training centers.

1. Compile a list of all possible training centers. See Section II on Surveying the Community.

2. Arrange for a personal interview in each firm which might serve as a training center. See Appendix Section on Interviewing Techniques.

3. Complete the information required on the form entitled "Occupational Survey of Job Opportunities and Training Possiblities." See example at the end of this Section.

4. From the information obtained on the survey form and with the assistance of the advisory council, use the following criteria in selecting training centers.

    a. The training center must provide an approved occupation.

    b. The training center must offer opportunities for advancement within the establishment or should aid in developing the trainees potential ability to the point he would be occupationally competent to make progress in other similar establishments.

    c. The job should require training -- not just a routine work experience of a repetitive nature.

    d. The training center should be able to provide a wide variety of experiences in the occupation.

    e. The establishment should provide the trainee with adequate supervision by an on-the-job instructor.

    f. The working conditions should be satisfactory, clean, safe, with pay on a par with similar jobs, etc.

    g. The training center should have a good reputation and be accepted by community as a reliable respected business establishment.

h. The moral climate of the establishment should be good.

i. The employer should have an interest in training the trainee.

j. The personnel should understand and appreciate the importance of the agricultural occupations training program.

k. The training center personnel should be capable and willing to provide an adequate number of training hours.

l. The training center personnel should be capable and willing to provide continuous training.

m. The training center should have adequate facilities, equipment and use up-to-date methods.

n. No regular employee should be laid off in order to train students.

o. The training center should be a reasonable distance from school.

p. Good employer-employee relationships should exist.

q. The training center should do a reasonable volume of business.

OCCUPATIONAL SURVEY OF JOB OPPORTUNITIES AND TRAINING POSSIBILITIES

Interviewer________________________________ Date__________

School____

1. Official name of establishment________________________

2. Address______________________________ Phone No.________

3. Name and title of person interviewed____________________

4. Estimated per cent of gross income that is agriculturally orientated____

5. In reference to company policy, can this firm hire high school age personnel?________ Do you have a minimum wage? ______ If so what?_____

6. Is their a labor union in the firm?_______

7. Would your firm cooperate as a training center for high school students? Yes ____ No ____ If Yes what specific jobs?____________________
____

8. Main function(s) of this company:
   Manufacturing__________
   Processing__________
   Sales__________
   Service__________
   Specialized Agriculture__________
   Recreational Activities__________
   Professional Services__________
   Other__________

9. Total number of employees: Male ____ Female ____

10. Classification of employees:

Type of Job	Number employed		Level*
	Now	Next 5 years	

11. Does company plan an expansion program within the next 5 years? Yes ____ No _____. If yes, what new jobs will be created?____________________
____

12. Would you be willing to serve on an advisory committee for this program?____________

13. Would a student employee be insured by your company? __________

14. What background training is needed for student employees?____________
____

15. Could this school offer classes to help your employees?____________ What classes specifically?________________________

* Level - 1. Professional, 2. Technical, 3. Agricultural Service, 4. Managerial, 5. Supervisory, 6. Sales, 7. Clerical, 8. Skilled, 9. Semi-skilled.

SECTION XI

DEVELOPING THE TRAINING PLAN AND TRAINING AGREEMENT

One of the advantages of the agricultural occupations program is that the training is centered around an organized plan. Proper training consists of deliberate efforts to prepare a person for competency in an occupation. To accomplish this, a directed progression of jobs, operations and processes is needed. Particular care must be taken so that trainees participating in an agricultural occupations program are engaged in a training experience and not merely a wage earning experience. To insure that trainees will receive proper training a Training Plan is developed.

The Training Plan (see the following page) consists of a listing of the activities in which the trainee will be engaged at the training center. Opposite this is a listing of the material that the trainee will study in the related instruction period at school. Space is provided so that a record of progression can be kept of the job training experience and a grade can be recorded for the related instruction studied. All activities considered essential to the occupational training, both in school and at the training center should be included in the Training Plan.

The Training Plan for each trainee should be completed before the student begins the on-the-job training. It should be designed cooperatively between the teacher-coordinator and the employer. Before final approval of the plan is made it should be reviewed by the advisory council. When the final plan has been approved, the trainee on-the-job instructor, and teacher-coordinator should all receive a copy. This will enable all persons involved in the training to coordinate their efforts.

An example of a section of a Suggested Training Plan is as follows:

Suggested Training Plan for Dairy Processing (Page 3 of 5 pages)

JOB TRAINING What the Worker Should be Able to Do	Progress	RELATED INFORMATION What the Worker Should Know	Grade	Date
40. Prepare acedophilus milk		40. Uses and preparation of acedophilus milk		
41. Wash and sterilize milk containers		41. Bottle and can washers; the types and their operations		
42. Wash and sterlize equipment		42. Washing preparations; their characteristics and uses		
43. Bottle milk		43. Types of bottle fillers and their operation		
		44. Types of milk containers and precautions to be followed in their use		
		45. Milk delivery schedules		
Concentrated and Dried Milk Processing				
		46. Importance of concentrated milks		
		47. Types, characteristics, and uses of concentrated milks		
48. Prepare milk for condensing		48. Manufacture of condensed milk		
49. Condense milk				
50. Crystallize lactose				
51. Pack and store condensed milk				
52. Prepare milk for evaporation		52. Manufacture of evaporated milk		
53. Stablize milk that is to be evaporated				
54. Pack milk				
55. Sterilize milk				
56. Control viscosity of evaporated milk by shaking				
		57. Importance of the dry milk industry		
		58. Types, characteristics, and uses of dried milk		
59. Prepare milk for drying				
60. Dry milk		60. Manufacture of dried milk		
61. Prepare dried milk for packing				
62. Pack and store dried milk				
Buttermaking				
63. Grade, sample and weigh cream		63. Development of buttermaking industry		
		64. Composition and standardization of butter.		

After a trainee has been placed in an approved Training Center, a training agreement should be completed. One copy should go to the employer, one copy to the student and two copies should be retained by the agricultural department and school.

An example of a Training Agreement appears on the following page.

________________PUBLIC SCHOOLS
Vocational Agriculture Department

TRAINING AGREEMENT FOR AGRICULTURAL OCCUPATIONS

This establishes an agreement between______________________________
(School)
and______________________________regarding the employment of
(Training Center)
______________________________ in ______________________________
(Trainee) (Occupation)

The provisions of this agreement are:

1. The on-the-job training will be in charge of______________________________ (on-the-job instructor) for a period of __________weeks.
2. The student will begin training on ______________ (date) at the beginning wage of______________.
3. The trainee will work at least ______ hours per week in the Training Center.
4. The school shall be responsible for providing technical and related instruction.
5. The trainee shall progress from job to job in order to gain experience in all phases of the occupation listed in the Training Plan.
6. The schedule of compensation shall be fixed by the training center and shall be paid the same as to others with the same experience and ability.
7. The Agricultural Occupations Teacher-Coordinator will assist with the adjustment of any problems.
8. The trainee agrees to perform his duties at the training center and in school diligently and faithfully.
9. The trainee shall have the same status as other employees of the center. The training may be terminated for the same reason as for any other employee.
10. No regular employee shall be laid off to train students.
11. If the trainee drops out of school, he will not be employed by the training center for a period of at least 90 days.

We the undersigned are familiar with, and agree to the above provisions.

______________________________ (Trainee)	______________________________ (Employer)
______________________________ (Parent or Guardian)	______________________________ (Agricultural Occupations Teacher-Coordinator)
______________________________ (School Administrator)	______________________________ (Chairman, Advisory Council)

SECTION XII

INSTRUCTIONAL AIDS AND MATERIALS

Providing adequate instructional materials is a must for gaining the utmost from a program of this type. The individual assignments the student will be required to complete during the related instructional period must be supported by ample reference material. In addition to reference material, many occupations will require the use of other equipment in the teaching of related information. As previously stated, most vocational agriculture departments will possess some of this material and equipment.

Since each of the different occupations trained for, will require specific reference and instructional material, no attempt will be made to list the instructional material needed for each of these occupations. It is hoped that in the near future a listing of the various agricultural occupations with the instructional material needed for training in each will be made.

Certain instructional material will be the same for all schools offering agricultural occupations training, regardless of the several types of occupations included in the training program.

The following is a list of references that could be purchased by all schools offering agricultural occupations training. This list does not include all the available references and is merely indicative of some that are available.

Handbook of Agricultural Occupations, Hoover, N. K; The Interestate Printers and Publishers, Danville, Illinois, 1963.

Guidance in Agricultural Education. Byram, Harold M. The Interstate Printers and Publishers, Danville, Illinois. 1959.

Occupations Outlook Handbook, 1963 Revision, U. S. Department of Labor, Bureau of Labor Statistics, Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C.

The following may be obtained from:

U. S. Department of Labor, Wage and Hour and Public Contracts Division, Washington 25, D.C.

A Guide to Child-Labor Provisions of the Fair Labor Standards Act. Child Labor Bulletin No. 101.

Agriculture and the Child Labor Requirements of the Fair Labor Standards Act, Child Labor Bulletin No. 102.

Employment of Student-Learners, Title 29, Part 520.

Agriculture and Related Exemptions Under the Fair Labor Standards Act, Pamphlet.

Examptions Applicable to Agriculture, Processing of Agricultural Commodities, and Related Subjects, Title 29, Part 780.

Area of Production, Part 536 (29CRF)

Employment of Full-Time Students in Retail or Service Establishments at Special Minimum Wages, Part 519, 29CFRO

Handy Reference Guide to the Fair Labor Standards Act, Pamphlet.

Social Security, Numerous miscellaneous pamphlets on Social Security may be obtained from local Social Security Offices.

Publications on Occupational Information in Agriculture, Byram, Harold and Albracht, James. College of Education, Michigan State University, East Lansing, Michigan, 1964.

Agricultural Occupations Information, State Board for Vocational Education, Olympia, Washington, 1964.

Occupations for Persons Trained in Agriculture. College of Agriculture and Home Economics. The Ohio State University, Columbus, Ohio.

Student Study Guides Available for Use in Cooperative Training Programs. Industrial Education Department, University of Texas, Austin, Texas.

Publicity Handbook, Sperry and Hutchinson Company, Consumer Services 4242. W. 42nd Place, Chicago, Illinois.

SECTION XIII

COORDINATION OF THE PROGRAM

The objective of coordination in the agricultural occupations program is to correlate all the helpful agencies and factors that contribute to the successful training of students. Many people are confused concerning the actual duties of coordination. Some suppose that it only involves the visitation of training centers to see if the trainees are working. An adequate job at coordination involves many duties. Some of the duties associated with coordination are:

1. Placement of trainees in satisfactory jobs.
2. Follow-up of trainees after placement.
3. Contacts with employers to establish cooperative relationships.
4. Assistance in making analysis of various occupations.
5. Assistance in developing training plans.
6. Conferences with students.
7. Contacts with advisory committees.
8. Checking trainee rotation on the job.
9. Evaluating student progress.
10. Contacts with employers, labor groups and school administrators regarding the functioning of the over-all program.
11. Relationships with vocational counselors.

Coordinators Schedule of Classes

The amount of time a teacher-coordinator would devote to the agricultural occupations during the regular school day would depend on many factors. Sufficient time should be allotted during regular school hours for coordination. At least one hour and in some cases two hours should be provided for the related instruction period. Since the agricultural occupations teacher-coordinator has a vital role in student guidance, at least one period per day should be free for student conferences.

Following is an example of a daily class schedule of a coordinator who has from 15 to 25 students enrolled in Agricultural Occupations.

Six 55 minutes periods per day

1st period - Regular Academic Class Teaching or Related Agricultural Occupations Instruction

2nd period - Conference

3rd period - Related Agricultural Occupations Instruction

4th period - Coordination

5th period - Coordination

6th period - Coordination

Note: If the number of students enrolled is small, the amount of time for coordination may be decreased. However, some time doing the regular school day must be left open for coordination.

A Student's Suggested Three Year Course of Study

The agricultural occupations program is designed to offer occupational training to students who plan to terminate their formal education upon graduation from high school. This does not mean however, that a student can not continue his education on a higher level when he graduates. In many cases the agricultural occupations training will be a definite asset for students who wish to further their formal education.

The following is an example of the high school subjects an agricultural occupations student might take in a three year senior high school. As can be seen, the student would receive specific occupational training and still meet the requirements for entrance to any state supported institution of higher learning in Colorado.

Sophomore Year

English, Ag. I, Math., World History, Fed. Gov. or P. E., Elective

Junior Year

English, Ag II, Biology, Chemistry or Physics, Elective

Senior Year

English or Speech, American History, Ag. Occupations

Following is an example of a students daily schedule of classes in a school with a six period day.

Sophomore Year

Period

1st	2nd	3rd	Noon	4th	5th	6th
Ag I	World History	Fed. Gov		English	Algebra	Study Hall

Junior Year

Period

1st	2nd	3rd	Noon	4th	5th	6th
English	Ag II—	————		Biology	Chemistry	Typing

Senior Year

Period

1st	2nd	3rd	Noon	4th	5th	6th
Speech	American History	Ag. Occupations Related Instruction		Ag. Occupations	(on-the-job training)	

Placement of Trainees in Training Centers

The placement of qualified trainees in suitable training centers is a rewarding climax to the efforts expended in making surveys of the community and school, canvassing employers, publicizing the program and selecting qualified students for training.

After the list of qualified trainees and suitable training centers has been completed, the Agricultural Occupations Teacher-Coordinator has a big job in insuring that the proper trainee is placed in the right training center. However, the final selection of the trainee to work in a particular training center should be made by the employer.

Following is a list of activities that the coordinator can perform to help place the proper trainee in a desirable training center.

1. If possible, before a student applies for a job, give instruction on job classifications, employer-employee relations and methods in applying for a job.

2. From the list of eligible students select those that most interested and qualified for each particular occupation.

3. Give the list to the proper employer and let him select the students he wants to interview.

4. If some jobs require an application form, guide the student in completing this form, but let the student gain the experienee of actually completing such a form.

5. In some cases, the teacher-coordinator may wish to go with the student and introduce him to the employer. However, this depends upon the individual student. The teacher-coordinator from his knowledge of the student should know whether to use this procedure or not.

6. After the employer has had an opportunity to interview the students, the teacher-coordinator should assist him in his selection by furnishing him all the information available about each student. This can best be done by letting him review the Student Information Sheet. The teacher-coordinator should refrain from giving his personal recommendations or arbitrarily assigning a trainee to a training center. Remember, the final selection of the trainee should be made by the employer.

Supervision of Trainee on the Job

Periodic visits to the training centers are necessary for efficient program operation. They are valuable in correlating related classroom instruction with on-the-job training; in making comparisons between actual work accomplished with the training plan content; and in evaluating student progress on the job.

It is not practical to specify an exact number of visits to each training establishment. Each training situation differs. It is necessary to make more frequent visits at some place of employment than at others. On the average however, the teacher-coordinator should visit each center every seven to 10 days.

Following is a list of information to gather when a coordinator makes a supervisory visit.

1. Is the employer satisfied with the trainee?

2. What is the trainees attitude toward his job, employer, fellow workers?

3. Is the student progressing according to the training plan?

4. What instruction is being given on the job?

5. Is the student satisfied with his training?

6. What related instruction is in need of urgent attention?

While supervising the student at the training center, the teacher-coordinator will undoubtedly be confronted with problems. Most of the problems arise due to a misunderstanding of the trainees or employer's responsibilities. The coordinator can not eliminate the possibilities of problems arising but he can reduce their numbers by informing all people concerned of the objectives and procedures of the program.

Following is a list of difficulties which may arise:

1. The employer expects too much of a beginner.

2. Trainees may claim the rate of pay is too low for work being performed.

3. Trainees do not know what their duties or responsibilities are.

4. The trainees have friends who visit them while on the job and cause inattention to business.

5. The employer fails to provide adequate training.

6. The employer expects work from the trainee at irregular hours.

When supervising trainees, it is appropriate that the employer be made aware of the visit. It is a simple courtesy to clear the visit through the person in charge. If the employer wishes to discuss something personally about the trainee, it is best to hold the conference away from the trainee and his work area.

Following is a list of "Do's" and "Don'ts" to follow while visiting training centers.

DO

1. Be alert. Observe what is going on without appearing to "snoop".

2. Be friendly with everyone without fraternizing with them.

3. Show an interest in the work in progress. Be curious; ask questions if the opportunity presents itself.

4. Make notes (after leaving) on items which may be used for a conference with the student or for study assignments.

5. Be quick to sense the employer's desire to terminate a conference.

DON'T

1. Don't call attention to errors, bad practices, unsafe conditions, and the like while visiting the trainee. Do so in private conference.

2. Don't try to demonstrate to a trainee how to do a job to which he is assigned.

3. Don't pose as an expert or authority on any matter concerning the work going on.

4. Don't request a conference with the employer when he is obviously too busy.

5. Don't engage in so-called "friendly" arguments on controversial questions.

6. Don't interrupt or interfere with the trainee's work.

7. Don't permit a visit to degenerate into a "bull" session with the employer or employees.

8. Don't appear to be loafing or just "passing the time".

9. Don't handle tools, machines, or equipment unless invited to do so.

Some other general points in connection with supervision of the trainees at the training center are:

1. Plan a weekly schedule in advance so that the most benefit can be derived from the time available. This also enables persons to get in contact with the teacher-coordinator when he is not at school.

2. Check out with the school office each day before leaving the school. Indicate when you will return to the office.

3. Keep a record of your observations on each visit to the training center. An example of a visitation form is found on the following page.

TEACHER-COORDINATOR'S VISITATION RECORD

Training Center__________________________ Official Contact____________________

Trainee____

Date____________________________________Time of Visit__________________________

Points to Observe	Comments
1. Conditions surrounding the establishment	
2. Attitude of workers toward teacher-coordinator and trainee	
3. Specific operations in which trainee is engaged	
4. Immediate related subject matter needed	
5. Personal appearance of the trainee	
6. Apparent interest of trainee in work	
7. Apparent interest of employer in trainee	
8. On-the-job instruction being given	

Evaluation of Students

Since the trainee will be receiving high school credit while working, it is necessary to have some method of evaluating the trainee fairly. Part of the grade will be determined by his progress in completing the related instruction assignments. Another part of his grade will be determined by the performance on the job. Most teacher-coordinators will have little trouble in determining the progress made in completing the related instruction assignments, since a daily grade will be given on many assignments. However, the rating of the on the job performance should be determined by the employer since he has much closer contact with the student than the teacher-coordinator. In many instances, the employer has had no previous experience in completing ratings of this type. The teacher-coordinator should thoroughly explain the rating system so that the employer may make a valid evaluation. It must be kept in mind that most employers will tend to overrate students involved in a program such as this.

Following is an example of a rating form that may be used by employers. There is no prescribed method of distributing this form, but there is a definite advantage in giving the forms to the employer in person and, if possible, having him complete it while the teacher-coordinator is present.

EMPLOYER'S PERIODIC RATING FOR TRAINEES IN AGRICULTURAL OCCUPATIONS

Trainee________________________________ Date________________

Training Center________________________ Rated by________________

DIRECTIONS: Please circle one of the numbers (from 1 through 10) opposite each of the five factors in the left-hand column which you think most nearly indicates the trainees rating for the past six-weeks school period.

FACTORS	UNSATISFACTORY	BELOW AVERAGE	AVERAGE	ABOVE AVERAGE	EXCELLENT
PROGRESS	1 2	3 4	5 6	7 8	9 10
Has he advanced in skill and knowledge during the past 6 weeks?	Has made almost no progress.	Has progressed in only a few phases of his training.	Has made average progress in his training	Has advanced beyond expectations.	Exceptional progress made in skills and knowledge.
INITIATIVE	1 2	3 4	5 6	7 8	9 10
Can he originate and carry through on ideas?	Has to be told everything to do.	Seldom goes ahead on his own.	Goes ahead on routine matters.	Frequently looks for additional work to do.	Always finding jobs that need to be done.
RELIABILITY	1 2	3 4	5 6	7 8	9 10
Can the student be depended upon in his work?	Can seldom be relied upon.	Frequently fails to come through.	Can be relied upon in most cases.	Only occasionally fails to come through.	Can be relied upon implicitly in all matters.
WORK ATTITUDE	1 2	3 4	5 6	7 8	9 10
Does he have a good attitude toward his work?	Bored; shows little enthusiasm.	Rationalizes his shortcomings and mistakes.	Normally enthusiastic about his work.	Tries to improve his work in most cases.	Is always alert to finding ways of improving work.
COOPERATION	1 2	3 4	5 6	7 8	9 10
Does he work well with others?	Always wants his own way; is hard-headed.	Hard for others to work with.	Usually congenial and easy to work with.	Works well with his associates.	Cooperates fully in all matters.

ADDITIONAL REMARKS:

TEACHING RELATED INSTRUCTION

Related instruction will be of two types: A core of common general related instruction which will be presented to all students regardless of the occupation in which they are working, and instruction related to each specific job on which the different students will be working.

In the teaching of general related instruction all the various methods and techniques common to the teaching of regular vocational agriculture may be used. Following is a list of possible topics that could be taught in the core of common general related instruction. In most instances additional topics will be covered.

1. Becoming familiar with the Agricultural Occupations program.

2. Determining the importance of agriculture in the community.

3. Choosing a career.

4. Applying for a job.

5. Developing desirable personal traits.

6. Parliamentary procedure.

7. Budgeting your income

8. Saving and investing

9. Taxes

10. Labor Unions

11. Employer-employee relations

12. Your personality

13. Business forms and documents

14. Social and business etiquette

15. Business ethics

16. Social Security, income tax, withholding, fringe benefits, etc.

The specific related instruction has to do with the information and knowledge needed for competency in a skilled occupation. Since each student will be covering different material involving different occupations, group teaching techniques may be more difficult to employ. Individualized instruction must be used more frequently so that the needs of each student can be met. Most of this will be done through individualized supervised study. Since vocational agriculture instructors are familiar with the use of this technique, no further explanation is needed.

The material which a trainee studies during the specific related instructional period will be determined from the training plan and should be correlated with the on-the-job work in which the student is engaged.

A student study guide should be developed for each occupation in which training is offered. In some cases these have been developed by other states and are available for a nominal fee. The address for securing a catalog may be found in the chapter on instructional aids and materials.

The trainee study guide should contain key questions, problems and other assignments to enable the trainee to become familiar with the information which the training plan lists as being pertinent to the on-the-job training. The study guide should also list the references and, in some cases, present basic information so that the trainee may comprehend the material by working on an individual study basis.

An example of a Trainee Study Guide follows:

Example of an
Assignment Sheet

Covering
Units 46-62

CONCENTRATED AND DRY MILK PROCESSING

The background underlying the development of concentrated-milk plants and plants for the manufacture of dried milk are quite dissimilar. Whereas, dried milk dates back to the days of Marco Polo and the Tartars, concentrated milk is comparatively recent. Gail Borden is given credit for being the first person to manufacture condensed milk successfully. The idea for the spray method of drying milk was originated by Percy in New York about twenty-five years later, in 1872. Preserving milk by sterilization was patented by Meyeberg about this same time.

Concentrated and dried milks have gradually been improved since their introduction on a commercial basis. Although, the amount of milk thus processed may seem small, actually more milk is canned than any other single food product. When science has learned how to overcome the many problems which face the processors of concentrated and dried milk, the market milk industry is going to be radically changed.

In this assignment you will have an opportunity to familiarize yourself with the processes and problems involved in the manufacture of concentrated and dried milk.

Assignment:

1. Read the reference listed below.
2. (a) Make a pencil drawing or sketch of a condensing pan which will enable you to show its operatinn. (This may be a drawing of the condensing pan used in the plant where you are employed.) Label the main parts of the washer on your drawing.
   (b) Write a paper describing how the condensing pan operates and the procedure involved in its use.
3. Answer the questions and hand them in with item 2 by ____________________________.

Reference:

A. Herrington, Milk and Milk Processing, pp. 248-269.

Questions:

True-False

Directions: The following statements are either true or false. If the statement is true, draw a circle around the letter "T". If it is false, draw a circle around the letter "F".

T F 1. Milk can be dried at alower temperature when a vacuum chamber is used in connection with the drum process.

T F 2. The storage temperature for powdered milk must be within a certain range or else defects will occur in the product.

T F 3. The vacuum chamber method is recommended over all other processes for producing dried milk that has a minimum of cooked flavor.

T F 4. After milk has been dried, it is ground up and sifted before being packed.

T F 5. Approximately three times as much powdered whole milk is sold each year as powdered skim milk.

T F 6. The pasteurization of condensed milk takes place in the condensing pans.

T F 7. It is recommended that evaporated milk always be homogenized.

T F 8. Most sweetened condensed milk is homogenized.

T F 9. Oxidized flavors are the most common defects that occur in the manufacture of powdered milk.

T F 10. Roll milk powders are less apt to develop rancid flavors than powdered milk made by the spray process.

T F 11. Dried milk is said to be hygroscopic because it absorbs moisture from the air.

T F 12. The condensing process is used in the manufacture of evaporated milk.

T F 13. Precondensing allows greater economics to be achieved in the manufacture of powdered milk.

T F 14. Most powdered milk is processed by the spray method.

T F 15. Rapid crystallization favors the formation of larger lactose crystals than those formed at slower rates.

T F 16. The preheating temperature recommended for milk that is to be condensed is about 143 degrees Fahrenheit.

T F 17. Bacteria spoilage cannot take place in food that has been properly dried.

T F 18. In the manufacture of sweetened condensed milk, approximately 20 pounds of sugar is needed for each 100 pounds of whole milk.

T F 19. Most of the concentrated milk sold is condensed.

T F 20. The per capita consumption of canned milk is greater than that for any other canned food.

T F 21. Drying is one of the oldest methods used for preserving foods.

T F 22. Small powdered milk granules are more readily soluble in water than large granules.

T F 23. As the forewarming temperature for evaporated milk is increased, the product becomes more viscous.

T F 24. Concentrated milk must be sold in sealed cans if it is to be used for human consumption.

T F 25. After the can has been opened, evaporated milk must be given the same protection as pasteurized milk.

T F 26. After evaporated milk is sterilized, it is packed in the cans.

T F 27. The chance for evaporated milk coagulating is greatest during the forewarming process.

T F 28. Dried skim milk is used primarily as a feed for animals and poultry.

T F 29. Evaporated milk must be cooled rapidly after sterilization to prevent the formation of excessive large lactose crystals.

T F 30. The term seeding is used in reference to the process for preventing the formation of excessively large lactose crystals.

T F 31. Federal standards require that at least 38 per cent sugar be added to sweetened condensed milk.

T F 32. Dried milk manufactured by the drum process is more soluble than that made by the spray method.

T F 33. In the roll process, milk is dried by a blast of hot air.

T F 34. Concentrated and dried milk are this country's chief dairy exports.

T F 35. The tendency for condensed milk to thicken increases if sugar is added before forewarming.

T F 36. Most of the sweetened condensed milk is made from whole milk.

Completion

Directions: Fill the blank(s) in each statement with the word(s) required to complete the sentence correctly.

1. Disodium phosphate or sodium citrate is frequently used to ____________ __________________________evaporated milk.

2. Evaporated milk is sterilized at a temperature of approximately ____________________hundred and forty degrees Fahrenheit.

3. Evaporated milk is agitated during the sterilization process to break down any milk that may ______________________________.

4. Oiling off is apt to occur when reconstituting powdered milk that was manufactured from __________________ milk.

5. When sugar is added to milk that is to be condensed, it should be added ________________________ the milk is preheated.

6. Sweetened condensed milk will ____ ______________ if it is not stored at sufficiently low temperature.

7. Approximately 200 units of milk are required to produce ______________ units of condensed milk.

8. Sucrose will prevent the growth of ___________________ in milk if it is added in sufficient quantities.

9. The federal standard for milk fat and milk solids is the same for evaporated milk and __________________ condensed ______________ milk.

10. Powdered milk manufactured from milk that was heated above 160 degrees Fahrenheit will have its __________________ reduced.

11. Milk that is to be condensed must first have its __________________ and total _________________________ content standardized.

Listing

Directions: List the answers called for in the following statements. Select your answers carefully.

1. The chief criticisms levied against the use of evaporated milk are:

(1)___________________________ (2)___________________________

2. The two general classes of concentrated milk are:

(1)___________________________ (2)___________________________

3. The advantages of preheating milk before it is condensed are:

(1)___________________________ (3)___________________________

(2)___________________________

4. The most common causes for evaporated milk coagulating are:

(1)___________________________ (3)___________________________

(2)___________________________

5. The advantages of using evaporated milk are:

(1)________________ (5)________________

(2)________________ (6)________________

(3)________________ (7)________________

(4)________________

6. The criteria on which dried milk is graded are:

(1)________________ (4)________________

(2)________________ (5)________________

(3)________________

7. The names of the various types of milk powder are:

(1)________________ (4)________________

(2)________________ (5)________________

(3)________________ (6)________________

Matching

Directions: In the right hand column appear the names of the various types of concentrated milk, and in the left hand column are listed ingredients that are peculiar to each type. Match each letter on the right with the appropriate phrases on the left. (Note: A letter may be used more than once in completing the blanks.)

_____ 1. At least 20 per cent m.s.n.f., but no sugar

_____ 2. High in riboflavin content

_____ 3. Contains 8.5 per cent milk fat and at least 28 per cent milk solids.

_____ 4. Approximately 44 per cent sugar

_____ 5. At least 7.9 per cent milk fat and at least 25.9 per cent milk solids

_____ 6. Highly valued as a pig feed

_____ 7. At least 24 per cent m.s.n.f.

A. Sweetened condensed milk

B. Sweetened condensed skim milk

C. Unsweetened condensed milk

D. Unsweetened condensed skim milk

E. Semisolid buttermilk

SECTION XIV

RECORDS AND REPORTS

Certain records are essential for any sound educational program. It is also important that a reporting system be developed which will keep local and state school officials appraised of program accomplishments.

Records

It is recommended that the following records be maintained in the department files:

1. Employers rating of trainee progress.
2. Weekly visitation reports.
3. Placement record of former students.
4. Student information sheets.
5. Individual trainee earnings and hours worked while enrolled in the program. See page 64.
6. Individual training plans.
7. Student record books that are completed. See page 64.
8. Evaluation forms found in Section XIII.

Reports

The following reports are required by the State Board for Vocational Education.

1. Annual employment report of students.
2. Form 2 - (request for approval of H.S. program)
3. Form 3 - Request for approval of out of school program.
4. Form 4 - Completion report for out of school programs

5. Annual statistical and reimbursement claim..

6. Course outline for each course to be taught.

7. Annual FFA Report.

The forms for completing the above reports are available upon request from the State Supervisor of Agricultural Education, 510 State Office Building, Denver, Colorado.

The following reports should be filed with the local school administrator.

1. Weekly report of student visitations.

2. Copies of all reports to the State office.

Other Reports

All students receiving training in the Agricultural Occupations program are regularly enrolled students in high school, consequently all records or reports required by the school or department for any student must be maintained (class roles, attendance, grade sheets, enrollment cards, registers, etc.).

Minutes of the meetings of the Advisory Council should also be kept on file for reference.

Example of a Record Book to be Kept by Trainees Enrolled in Agricultural Occupations Training.

______	______
Trainee	School
Dairy Processing	Brown's Dairy
Agricultural Occupation	Training Center
John L. Brown	51
Person Responsible for Training Student	Length of Training Period (Wks.)

HOURS:	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
In School---	8:30-2:30	8:30-2:30	8:30-2:30	8:30-2:30	8:30-2:30	XXX
Training Center	3:00-5:30	3:00-4:30	3:00-5:30	3:00-5:30	3:00-5:30	XXX

Beginning Wages: $ .95 per hour.

WEEKLY RECORD OF HOURS EMPLOYED AND EARNINGS

WEEK and Mon.Date	Hours Em-ployed	Rate per Hour	Total Wages	WEEK and Mon.Date	Hours Em-Ployed	Rate per Hour	Total Wages	WEEK and Mon.Date	Hours Em-ployed	Rate per Hour	Total Wages
1964 7-6 1	4	.95	3.80	11-9 19	15	1.05	15.75	3-15 37	15	1.25	18.75
7-13 2	12	.95	11.40	11-16 20	14	1.05	19.70	3-22 38	15	1.25	18.75
7-20 3	15	.95	14.25	11-23 21	24	1.05	25.20	3-29-39	16	1.25	20.00
7-27 4	15	.95	14.25	11-30 22	15	1.05	15.75	4-5 40	15	1.25	18.75
8-3 5	17	.95	16.15	12-7 23	12	1.05	12.60	4-12 41	10	1.25	12.50
8-10 6	18	.95	17.10	12-14 24	15	1.05	15.75	4-19 42	14	1.25	17.50
8-17 7	15	.95	14.25	12-21 25	30	1.15	34.50	3-26-43	15	1.25	18.75
8-24 8	21	.95	19.95	12-28 26	25	1.15	28.75	5-3 44	9	1.30	11.70
8-31 9	17	.95	16.15	1965 1-3 27	15	1.15	17.25	5-10 45	15	1.30	19.50
9-7 10	12	.95	11.40	1-11 28	14	1.15	16.10	5-17 46	15	1.30	19.50
9-14 11	15	.95	14.25	1-18 29	0	---	----	5-29 47	25	1.30	32.50
9-21 12	13	.95	12.35	1-25 30	5	1.15	5.75	5-31 48	18	1.30	23.40
9-28 13	15	1.05	15.75	2-1 31	10	1.15	11.50	6-7 49	10	1.30	13.00
10-5 14	14	1.05	12.70	2-8 32	15	1.15	17.25	6-14 50	0	---	---
10-12 15	15	1.05	15.75	2-15 33	13	1.15	14.95	6-21 51	19	1.30	24.70
10-19 16	9	1.05	9.45	2-22 34	16	1.15	18.40	6-28 52	6	1.30	7.80
10-26 17	10	1.05	10.50	3-1 35	13	1.15	14.95				
11-2 18	22	1.05	23.10	3-8 36	15	1.15	17.25	TOTAL	742	XXX	828.05

Note: This form should be attached to the student's copy of the training plan and should be filled out at the end of each week.

SECTION XV

PROGRAM EVALUATION

All sound educational programs should be evaluated at periodic intervals. This will help determine whether the objectives of the program are being met and thereby serve as a basis for making needed adjustments in the program.

The following forms are suggested as guides to help the teacher-coordinator evaluate the agricultural occupations program. The specific use for the different evaluations is listed on each form.

VOCATIONAL AGRICULTURAL OCCUPATIONS PROGRAM
EMPLOYER APPRAISAL

USE: An appraisal of the agricultural occupations program is to be completed by the employer after providing an approved Training Center and training one or more students. This information is to provide a basis for improvement of the total program.

Date____________ Firm____________________________________

Employer__________________________Name of Student Trainee___________________

Length of training period given trainee____________________.
(months)

1. Rate the agricultural occupations program, based on your own association with it. Outstanding_____ Good_____ Average _____ Poor_____.

2. What do you believe to be the greatest strength of the agricultural occupations training program?

3. What do you believe to be the greatest weakness of the agricultural occupations training program?

4. Rate the total performance of your trainee in comparison with other beginning workers.
   Above average_____ Average _____ Below average_____.

5. Did you have sufficient school cooperation? Yes _____ No _____.

6. Did you have sufficient contact with the teacher-coordinator? Yes____No____

7. Do you feel the agricultural occupations program should remain a part of the school program? Yes_____ No _____

8. Do you plan to continue to participate in the agricultural occupations program? Yes_____ No _____.

9. Has this program provided the experience you desire of an employable person? Yes_____ No_____.

10. Has the trainee received sufficient training to be hired full time by your firm if an opening existed? Yes_____ No_____.

11. For what level of employment is this trainee now competent to become engaged?____
    (Job title or description)

VOCATIONAL AGRICULTURAL OCCUPATIONS PROGRAM

STUDENT APPRAISAL

USE: To be completed by the agricultural occupations student upon completion of the course as a means to measure the success of the total program and make needed adjustments.

Your name________________________ Age ____ Sex ____ Grade _____ Date________

1. List the firm and occupation in which you received on-the-job training.

Name of Firm	Occupation	Months of Service
a.		
b.		
c.		
d.		

2. What are your plans for next year? (check one)

a. High School____________	d. Employment____________
b. Trade School___________	e. Farming______________
c. College________________	f. Others (list)__________________

3. How valuable was the on-the-job training to you as part of the program? Very valuable _____ Some value _____ Little value _____. How could it be improved?____

4. How valuable was your related school instruction to the work you did? Very valuable_____ Some value _____ Little value _____. How could it be improved?____

5. How important was the opportunity to earn money while you were still in school? Very important _____ Some importance _____ Not important _____.

6. How could the on-the-job training have been made more valuable to you?

7. What topics covered in your school related instructional program helped you the most?

8. What regular school subjects were of most benefit to you?

9. Did you receive enough assistance from the agricultural occupations teacher-coordinator? Yes_____ No_____. How could he have helped more?

10. Did you receive enough assistance from your on-the-job employer-instructor? Yes _____ No _____. How could he have helped more?

11. How could your other teachers at school have helped you prepare for the job or jobs in which you were employed?

12. Would you have continued high school without participating in this program?
Yes _____ Probably _____ Probably not _____ No _____.

13. What type students would you recommend this type program for?
All students _________
College bound_________
Non-college bound______
Undecided students _________
Possible drop outs_________
Others (list)___________________________

14. How would you recommend that students be selected for this program?

15. What changes would you make in the overall agricultural occupations program?

16. List some ways the agricultural occupations training program has benefited you to date.

a.____
b.____
c.____
d.____
e.____
f.____

17. In what ways do you feel that agricultural occupations training program may help you in the future?
a.____
b.____
c.____
d.____
e.____
f.____

VOCATIONAL AGRICULTURAL OCCUPATIONS PROGRAM

FORMER GRADUATE APPRAISAL

USE: To be administered by the school to former students at periodic intervals to help determine needed adjustments in present programs and evaluate the success of past programs.

Name____ Date ____________________

1. List the occupations in which you received training during your participation in the agricultural occupations program.

Name of Occupation	Name of Firm	Duration of (on-the-job instructio instruction - months)

2. List the jobs you have held since graduation from high school. (Include months of military service and unemployment if applicable)

Job Title	Name of Firm	Length of time (months)

3. Did agricultural occupational training help you to obtain or advance in any of the areas listed below? Yes_____ No _____ If yes, check those that apply.

( ) a full-time job
( ) a part-time job
( ) a military service rating
( ) further education
( ) other occupations (specify) ______________________________________
____

4. Did your agricultural occupations training help you in any of the educational advancements listed below. If yes, check those that apply.

( ) high school
( ) trade school
( ) Junior college
( ) Four-year college
( ) Other (specify)____

5. Please rate your agricultural occupations on-the-job training experience:

	Excellent	Very Good	Good	Fair	Poor
a. Employer supervision (foreman, etc.)					
b. Help received from on-the-job training.					
c. Help received from other employees.					
d. Variety of job experiences.					
e. Opportunity for advancement.					
f. Wages paid you					
g. Working conditions					

6. Please rate your in-school instruction for agricultural occpuations as to its value in preparing you for your work experience:

	Excellent	Very Good	Good	Fair	Poor
a. Value of textbook work to job					
b. Value of coordinator's counseling					
c. Value of other teachers counseling					
d. Value of films					
e. Value of field trips					
f. Value of guest speakers					
g. Value of resource material studied					

7. Did on the job training interfere with other school activities? Yes___ No___
If yes, check those that apply.
   ( ) Athletics
   ( ) Music
   ( ) Dramatics
   ( ) FFA
   ( ) Other____

8. Would you recommend this type of agricultural occupations training to others?
Yes _____ No _____ No opinion _____

9. Are you now employed in the occupation for which you were trained? Yes___ No___
If "No", give your main reason for changing occupations. (check only one)
   ( ) No job available in my occupational field.
   ( ) Developed new interest.
   ( ) Disliked job.
   ( ) Made advancement to other levels.
   ( ) Never intended to work in my agric-related occupation.
   ( ) Earned more money elsewhere.
   ( ) Other reason (explain)________________________________
   ____

10. Please write any comments which you feel would help improve the agricultural occupations training progam as you experienced it:____________________
____
____

VOCATIONAL AGRICULTURAL OCCUPATIONS PROGRAM

CONFIDENTIAL APPRAISAL OF TRAINING CENTERS

USE: To be filled out by the teacher-coordinator of the agricultural occupations program at the end of the training period. It is to be kept as a completely confidential record. This information may be used in the selection of future training centers.

Name of Employer ______________________ Evaluator ______________________

Address ____ Date ______________

Activity ____ Scale ______________

	Scale			
Activity	Excellent	Good	Fair	Poor
1. Interest of the employer in the program				
2. Willingness to cooperate with advisory council.				
3. Respectability and responsibility of the employer.				
4. Quality of on-the-job instruction.				
5. Competency of the employees.				
6. Reputation of firm.				
7. Regularity of employment.				
8. Variety of work experiences available to student trainee.				
9. Volume of business.				
10. Wage paid to trainee.				
11. Opportunity for advancement.				
12. Company policies concerning employment of students.				
13. Standards of workmanship to be met.				
14. Degree of specialization required.				
15. Employer-employee relationship existing.				
16. Opportunity for permanent employment.				
17. Assistance given in the selection of qualified students.				
18. Employer supervision (foreman, etc.).				
19. Employer-customer relationship.				
20. Provides approved occupation.				
21. Distance of training center from school.				
22. Facilities, equipment and methods.				
23. Moral climate				

24. Number of training hours provided ______

25. Adequacy of training period to make trainee employable (Explain).

____

____

____

APPENDIX

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APPENDIX A. - SUMMARY OF COLORADO CHILD LABOR LAW OF 1963

MINIMUM AGE REQUIREMENTS

1. 14 Years

No minor under 14 years of age may be employed except in occupations provided for those 12 years of age or older, and except as provided under "exemptions."

Permissible occupations at age 12

1. Agricultural work
2. Sale and delivery of newspapers and periodicals, or the delivery of handbills, advertising, and the sale and delivery of articles of merchancise
3. Shoeshining
4. Babysitting
5. Gardening, care of lawns and cleaning of walks

2. 16 Years

No minor under 16 years of age shall be employed on school days during school hours, unless excused from attendance at school pursuant to law.

Prohibited occupations for minors under 16 years of age (except in agricultural work on a farm or ranch)

1. Any occupation in manufacturing
2. Operation of any steam boiler
3. Operation of any hazardous power driven machinery
4. Work involving risk of falling from any elevated place
5. Any occupation in a place where intoxicating beverages are served

3. 18 Years

No minor under 18 years of age shall be employed in the following occupations except as engaged in agricultural work on a farm or ranch or unless the employment is incidental to a program of apprentice training.

1. Manufacturing, transporting, or storying of explosives
2. Mining, logging, oil drilling, or quarrying
3. Any work involving exposure to radioactive substances or ionizing radiation, or to dangerous or poisonous acids, dyes, or gases
4. Operation of the following power-driven machinery: Woodworking machines, hoisting apparatus, freight and passenger elevators, metal forming machines, punching or shearing machines, bakery machines, paper products machines, shears, and automatic pinsetting machines

5. Slaughter of cattle and other farm animals, and rendering and packing of meat
6. Work directly involved in the manufacture of brick or other clay construction products or of silica refractory products
7. Wrecking or demolition
8. Roofing

4. HOURS OF WORK

Under 16 Years

Not after 9:30 P.M. - Not before 5:00 A.M.
Not more than 4 hours on a school day unless excused from attendance at school pursuant to law
(These provisions do not apply to babysitters)

Under 18 Years

Not more than 8 hours in a 20 hour period
Not more than 48 hours in any week
Not more than 6 consecutive days except in seasonal employment

5. EXEMPTIONS

Except for employment in occupations prohibited, the provisions of the Act do not apply to the following:

1. School work or supervised educational activities
2. Home chores and tasks undertaken as a contribution to the community
3. Work done for a parent or guardian, except where the parent or guardian receives any payment therefor
4. Newsboys and newspaper carriers

Any minor employed as an actor, model, or performer is not subject to the 14 year minimum age and may work until 10:00 P.M. if the next day is not a school day. If employed in the state for less than 15 days in any 12 month period, such minor shall be exempt from the entire Act except for prohibited occupations.

6. AGE CERTIFICATE

The employer may require a minor to submit an Age Certificate as proof of age. Certificates may be secured from the district or county school superintendent or from the principal, superintendent, or headmaster of an independent or parochial school. The minor must present proof of age to the issuing officer and must sign the Certificate in his presence.

The employer shall keep an Age Certificate received by him on file for the duration of the minor's employment. It shall be available for inspection by an agent of the Industrial Commission and shall be returned to the minor at the termination of his employment.

7. WORK PERMIT

Required for minors 14 and 15 years of age who wish to work on school days during schools hours. Permits are issued by the district school superintendent or by a person designated by the board of education, and only under certain conditions as prescribed by law. The minor and the parent or guardian must sign the permit in the presence of the issuing officer.

Upon termination of the employment the employer must return the Work Permit to the issuing officer with a notation showing the date of termination and the reason therefor.

- -

MINORS UNDER 18 years of age are subject to all Orders issued under the Colorado Minimum Wage and Labor Law for Women and Minors. They may also be subject to the Child Labor provisions of the Fair Labor Standards Act (Federal Wage & Hour Law). Information about the Federal Law can be obtained by writing:

U. S. Department of Labor -- 311 Equitable Building, Denver 2, Colorad

---

Address inquiries to: Industrial Commission of Colorado, State Capitol Annex,
Denver, Colorado 80302

APPENDIX B

U. S. FAIR LABOR STANDARDS ACT

Some of the occupations which these students will pursue will be those occupations that come under the U. S. Fair Labor Standards Act. It should be determined without any doubt if any occupation chosen by the student is affected by this act. This should be done in order that no student, school or employer violates any of the provisions of this act, either willfully or unintentional. The following material deals with the provisions of the act as it relates to the employment of students in agricultural occupations.

1. Hours

The number of hours at work and in school shall not exceed 40 hours per week. When school is not in session on any school day, the student-learner may work a number of hours in addition to the weekly hours of employment training, Provided, however, that the total hours worked shall not exceed 8 hours on any such day. A notation should be made in the employer's records to the effect that school not being in session was the reason additional hours were worked on such a day.

During the school term when school is not in session for the entire week, the student-learner may work at his employment training a number of hours in the week in addition to those authorized, Provided, however, that the total hours shall not exceed 40 hours in any such week. A notation should be made in the employers records to the effect that school not being in session was the reason additional hours were worked in such week.

2. Wages

Students may be paid at a lower rate than the minimum set by law. This can be done only by making application for a student-learner certificate and receiving approval. This application shall be filed by the employer with the authorized representative of the Administrator at the appropriate Regional or Territorial Office of the Wage and Hour and Public Contracts Divisions, United States Department of Labor. The regional office is located at 911 Walnut Street, Kansas City, Missouri 64106.

This certificate allows the employer to pay the student-learner at a wage rate per hour of 75 per cent of the minimum wage. It is suggested that a progressive wage schedule be proposed. If this is done the starting rate must not be less than 75 per cent of the minimum wage.

If the occupation in which the student is employed is not covered by the minimum wage law, the appropriate wage shall be determined by the employer and the advisory committee.

INFORMATION GUIDE AND INSTRUCTIONS FOR COMPLETING APPLICATION FOR STUDENT-LEARNER CERTIFICATES

Under regulations established pursuant to both the Fair Labor Standards Act and the Walsh-Healey Public Contracts Act student-learners may be employed at wages below the minimum wages established under those acts in accordance with certificates issued by the Wage and Hour and Public Contracts Divisions of the U. S. Department of Labor. The employment of student-learners at special minimum wages is subject to Regulations, part 520, issued under authority of section 14 of the Fair Labor Standards Act. Section 50-201.1102 of the general regulations under the Walsh-Healey Public Contracts Act recognizes the standards and procedures of Regulations, part 520, as applicable to the issuance of certificates permitting employment of student-learners at special minimum wages in the performance of Government contracts.

1. Coverage

The Fair Labor Standards Act applies to employees (including student-learners) engaged in interstate commerce or in the production of goods for interstate commerce, including any closely related process or occupation directly essential to such production, unless specifically exempt by some provision of the act. The act also applies to employees (including student-learners) who are not themselves engaged in or producing goods for commerce but who are employed in certain large enterprises engaged in commerce or in the production of goods for commerce. Popularly known as the Federal Wage and Hour Law, this act establishes minimum wage, child-labor, and maximum hours and overtime standards for employment subject to its provisions.

The Walsh-Healey Public Contracts Act applies in general to all contracts entered into by the Government for the manufacture or furnishing of materials, supplies, articles or equipment in any amount in excess of $10,000. This act requires the payment to employees engaged in the performance of such contracts of not less than the minimum wage determined by the Secretary of Labor to be prevailing for the industry. In addition, the Public Contracts Act contains special provisions for safety and health standards, restrictions against the use of child labor and convict labor, and special provisions for the payment of overtime for work subject to the act.

Special situations which may arise under thses two acts are explained in sub-section K. The Wage and Hour and Public Contracts Divisions will make available upon request bulletins on the coverage of these acts. If in doubt as to whether either or both of these acts apply to a particular type of employment, a letter setting forth the facts of your situation should be sent to the regional office of these Divisions which serves your area.

2. Who Is A Student-Learner

As defined in the regulation, a student-learner is a student who is receiving instruction in an accredited school, college or university, and who is employed on a part-time basis pursuant to a bona fide vocational training program administered by his school. A bona fide vocational training program is one authorized and approved by a State Board of Vocational Education or other recognized educational body. Such programs must provide for part-time employment training supplemented by and intergrated with a definitely organized plan of instruction designed to teach technical knowledge and related industrial information which is given as a regular part of the student-learner's course of study in the educational institution he attends. Such programs may be in retail and service occupations as well as in trade and industrial skills.

3. Who May File

Whenever it is believed necessary in order to prevent curtailment of employment opportunities, application may be made for a certificate authorizing an employer to pay student-learners special minimum wages below the applicable statutory (or wage order) minimum wage under the Fair Labor Standards Act or below a minimum wage determination under the Walsh-Healey Public Contracts Act. A separate application on official forms furnished for the purpose must be filed by the employer for each such student-learner. Parts of this application are best completed by a school official, other parts by the employer. The appropriate school official, the employer, and the student-learner must sign the application. Before a certificate can be issued, the conditions specified in section 520.5 of the regulation must be met. (See sub-section M for these conditions)

4. Where To File

Applications must be made on official forms supplied by the Divisions. The original of the completed application must be filed with the regional office of these Divisions serving your area. The regional office serving Colorado is:

U. S. Department of Labor
W.H.P.C. Division
911 Walnut Street
Kansas City, Missouri

A copy must be retained in the employer's files. Additional copies may be made available to school officials and to the student-learner.

5. When to File

Applications should be filed 15 to 30 days in advance of the date the student-learner begins his employment so that the Divisions can take action on the application before employment begins. Certificates Cannot Be Issued Retroactively.

When the student's employment opportunity might be lost by delay in obtaining a certificate, section 520.6 (c) (2) of the regulation establishes a procedure for a temporary authorization. A description of this procedure appears at the top of the face of the application.

6. Age and Proof of Age

Minors under 16 years of age are not eligible for student-learner certificates. Furthermore, in occupations declared to the hazardous by the Secretary of Labor, the student-learner must be at least 18 years of age. (Hazardous Occupations Orders Nos. 5, 8, 10, 12, 14, 16, and 17, permit student-learner employment at 16 and 17 years of age under certain specified conditions.) For information concerning child-labor provisions of the Fair Labor Standards Act, see Child-Labor Bulletin No. 101.

For employment subject to the Walsh-Healey Public Contracts Act, male employees must be at least 16 years old and female employees must be at least 18 years old.

In addition to entering the student-learner's birth date in item 3. of the application, the employer should obtain and keep on file an employment or age certificate showing the student-learner to be at least the minimum age for the occupation in which he is employed. In 45 States, the District of Columbia, and Puerto Rico, State employment and age certificates are accepted as proof of age under the child-labor provisions of the Fair Labor Standards Act. (Such certificates also provide assurance that the employment is in compliance with the requirements of the State child-labor law.) In four States, Idaho, Mississippi, South Carolina, and Texas, where state age and employment certificates are not available, Federal certificates of age may be obtained within the State from the Wage and Hour and Public Contracts Divisions. Special arrangements have been made in Guam and Alaska. For information concerning proof of age in these areas consult the nearest office of the Wage and Hour and Public Contracts Division.

7. Period of Employment Training at Special Minimum Wages

A certificate may be issued only for that portion of the employment training period for which special minimum wages below the minimum wages under the Fair Labor Standards Act or the Walsh-Healy Public Contracts Act are necessary. This period may not exceed the length of one school year unless a longer period is found to be justified by extraordinary circumstances which must be explained in detail at the time of application. No certificate shall authorize employment training beyond the date of graduation of the student-learner.

Employment training at special minimum wage rates during the summer vacation period will not generally be authorized. However, in exceptional cases summer employment training may be authorized when it is an integral part of the vocational training program. Requests for summer vacation employment must be accompanied by a statement explaining the extraordinary circumstances justifying this employment, including the number of hours per week for which special minimum wages are requested.

In item 16 of the application, show only the number of weeks of employment during which special minimum wages will be paid. The beginning and ending dates of employment shown in items 8 and 9 should coincide with this period.

8. Hours of Work and School Instruction

The term "hours of school instruction" applies to all hours spent by the student-learner in actual classes of school instruction and does not include school hours spent in study hall, homeroom, and activity periods for which no academic credit is given.

The combined hours of school instruction and employment training authorized under a certificate may not exceed 40 hours a week unless justified by extraordinary circumstances. Such extraordinary circumstances must be explained in detail in a statement submitted with the application. Hours at special minimum wages in addition to those authorized on a certificate may be worked provided that the total hours worked do not exceed:

(a) 8 hours on any school day when school is not in session;

(b) 40 hours in any week during the school term when school is not in session for the entire week.

The employer shall note in his records the number of such additional hours and that they were worked because school was not in session. (See Section II Hours). A Student-Learner May Not Be employed In Any Week At Special Minimum Wage Rates For Hours In Addition To Those Authorized In The Paragraph Above.

In item 17 of the application, show only those hours of employment during a week for which you intend to pay wages below the applicable minimum wage under the Fair Labor Standards Act or below the wage determination minimum applicable under the Public Contracts Act.

9. Wages Rates

The hourly wage rate shall be not less than 75 per cent of the applicable statutory minimum wage under the Fair Labor Standards Act. It is suggested that consideration be given to the payment of a progressive wage schedule, particularly if a full school year of employment training at special minimum wages is requested. If a progressive wage schedule is proposed, the special minimum starting rate must be not less than 75 per cent of the applicable statutory minimum. In item 18, show only those wages which are below the applicable minimum wage under the Fair Labor Standards Act. (This paragraph also applies to work subject to Public Contracts Act wage determinations.) See Sub-section 11.

APPENDIX C. - STUDENT-LEARNER CERTIFICATES

1. Certificates

The original copy of the student-learner certificate will be mailed directly to the employer. Two copies will be mailed to the appropriate school official, one to be retained for his records and the other to be presented to the student-learner. Applications Which Do Not Contain All Requested Information May Be Returned For Completion Before Action Is Taken. Student-learner certificates can be issued with a minimum of delay where the application provides the details requested. For additional information or application forms, communicate with the regional office of these Divisions which serves your area.

2. Special Situations Under The Walsh-Healey Public Contracts Act

The general provisions of this act are explained in the introduction to this guide. The general regulations under the Public Contracts Act permit the employment of student-learners at wages below prevailing minimum wage determinations made under this act in accordance with the same standards and procedures as are prescribed for their employment at wages below the minimum wage applicable under the Fair Labor Standards Act. The provisions of Regulations, part 520 and the instructions in this guide apply to student-learners employed in the performance of Government contracts subject to the Public Contracts Act.

An employer who holds or who obtains a student-learner certificate issued in order to prevent curtailment of opportunities for employment under the Fair Labor Standards Act may employ the named student-learner in the performance of a Government contract subject to the Public Contracts Act at the authorized special minimum wage and in accordance with the terms specified in that certificate.

An employer may not need a student-learner certificate in order to prevent the curtailment of employment opportunities under the Fair Labor Standards Act or his employees may not be subject to that act. In either case, an employer performing a Government contract subject to a minimum wage determination under the Public Contracts Act may, upon proper application be issued a certificate authorizing a special minimum wage rate not lees than 75 per cent of the minimum wage determination applicable to the contract being performed. Employment under such certificates is subject to the standards and procedures of Regulations, part 520.

3. Compliance

Certificates may not be issued if there are serious outstanding violations of a student-learner certificate previously issued to the employer or if there are serious violations of other provisions of the Fair Labor Standards Act by the employer which provide reasonable grounds to conclude that the terms of the certificate would not be complied with, if issued. Moreover, no certificate permitting a wage lower than the statutory minimum under the Fair Labor Standards Act or a Public Contracts Act minimum wage determination will excuse non-compliance with the child-labor, overtime, or other provisions of these acts or the regulations issued thereunder.

A certificat may be withdrawn if it is no longer necessary to prevent curtailment of opportunities for employment or if the employer fails to comply with the limitations in the certificate or otherwise violates the act.

4. Conditions Governing Issuance of Special Student-Learner Certificates

The following conditions must be satisfied before a special certificate may be issued authorizing the employment of a student-learner at subminimum wages:

(a) Any training program under which the student-learner will be employed must be a bona fide vocational training program;

(b) The employment of the student-learner at subminimum wages authorized by the special certificate must be necessary to prevent curtailment of opportunities for employment;

(c) The student-learner must be at least 16 years of age (or older as may be required pursuant to paragraph (d) of this sub-section);

(d) The student-learner must be at least 18 years of age if he is to be employed in any activity prohibited by virtue of a hazardous occupation order of the Secretary of Labor; (See Hazardous Occupations);

(e) The occupation for which the student-learner is receiving preparatory training must require a sufficient degree of skill to necessitate a substantial learning period;

(f) The training must not be for the purpose of acquiring manual dexterity and high production speed in repetitive operations;

(g) The employment of a student-learner must not have the effect of displacing a worker employed in the establishment;

(h) The employment of the student-learners at subminimum wages must not tend to impair or depress the wage rates or working standards established for experienced workers for work of a like or comparable character;

(i) The occupational needs of the community or industry warrant the training of student-learners;

(j) There are no serious outstanding violations of the provisions of a student-learner certificate previously issued to the employer, or serious violations of any other provisions of the Fair Labor Standards Act of 1938, as amended, by the employer which provide reasonable grounds to conclude that the terms of the certificate would not be complied with, if issued;

(k) The issuance of such a certificate would not tend to prevent the development of apprenticeship in accordance with the regulations applicable thereto or would not impair established apprenticeship standards in the occupation or industry involved;

(l) The number of student-learners to be employed in one establishment must not be more than a small proportion of its working force;

(m) The special minimum wage rate shall be not less than 75 per cent of the applicable minimum under section 6 of the Act;

(n) No special student-learner certificate may be issued retroactively.

5. Employment Records To Be Kept

In addition to any other records required under the record-keeping regulations, the employer shall keep the following records specifically relating to student-learners employed at subminimum wage rates:

(a) Any worker employed as a student-learner shall be identified as such on the pay roll records, with each student-learner's occupation and rate of pay being shown;

(b) The employer's copy of the application, which is serving as a temporary authorization must be available at all times for inspection for a period of 3 years from the last date of employment of the student-learner;

(c) Notations should be made in the employer's records when additional hours are worked by reason of school not being in session.

6. Duration of Certificates

A special student-learner certificate may be issued for a period not to exceed the length of one school year unless a longer period is found to be justified by extraordinary circumstances. No certificate shall authorize employment training beyond the date of graduation.

APPENDIX D

APPLICATION FOR STUDENT-LEARNER CERTIFICATE

The following form is a sample of the application for a certificate to employ a student-learner. It has been filled in with the required information (a hypothetical case). This should serve as a guide in the completion of the application under actual conditions.

APPLICATION FOR A CERTIFICATE TO EMPLOY A STUDENT-LEARNER

The certification of the appropriate school official on the reverse side of this application shall consititute a temporary authorization for the employment of the named student-learner at less than the statutory minimum wage applicable under Hazardous Occupations Orders of the Fair Labor Standards Act of 1938, as amended, or at wages below the applicable Walsh-Healey Public Contracts Act minimum wage determination, effective from the date this application is forwarded to the Divisions until a student-learner certificate is issued or denied by the Administrator or his authorized representative, provided the conditions specified in Section 520.6 (c)(2) of the Student-Learner Regulation (29 CFR 520) are satisfied.

PLEASE READ CAREFULLY THE INSTRUCTIONS FOR COMPLETING THIS FORM
PRINT OR TYPE ALL ANSWERS

1. Name and address of establishment making application:
Brown's Nursery
Anytown, Arkansas

2. Type of business and products manufactured, sold, or services rendered:
Nursery-Production and Sale of Nursery Stock; Landscaping

3. Name and address of student-learner:
Donnie Smith
Route 2
Anytown, Arkansas
Date of Birth: June 26, 1948

4. Name and address of school in which student-learner is enrolled:
Anytown High School
Anytown, Arkansas

INFORMATION ON SCHOOL INSTRUCTION

5. Number of weeks in school year	36
6. Total hrs. of school instruction per week	25
7. Number of hours directly related to employment training	5
8. Proposed beginning date of employment	7/10/64
9. Proposed ending date of employment	7/1/65
10. Proposed graduation date of student-learner	May 1966

11. Are Smith-Hughes Act or George-Barden Act funds used for this program? (Yes or No)	Yes
12. Was this program authorized by the State Board for Voc. Ed.?	Yes

13. If the answer to item 12 is "No" give the name of the recognized local educational body which has approved this vocational training program:

14. Outline the school instruction directly related to the employment training. (List courses, etc.)

1. Plant Identification
2. Soils and Fertilizers for Nursery Stock
3. Propagation
4. Pruning, Grafting and Budding.
5. Heat, Light Water and Humidity Requirements
6. Insect and Disease Control
7. Nursery Equipment
8. Landscape Design

Form WH-205 (10/63) ATTACH SEPARATE PAGES IF NECESSARY

Information on employment training at special minimum wages:

15. How is employment training scheduled (weekly, alternate weeks, etc.)?	Weekly
16. Number of weeks of employment training at special minimum wage	36
17. Number of hours of employment training a week	15
18. Special minimum wage(s) to be paid student-learner (if a progressive wage scale is proposed, enter each rate and specify the periods during which it will be paid):	$.95 per Hr_First 12 Weeks $1.05 per Hr_Second 12 Weeks $1.15 per Hr - Third 12 Weeks
19. Title of Student-learner occupation:	Nurseryman
20. Number of employees in this establishment	7
21. Number of experienced employees in student-learner's occupation shown in question 19	2
22. Minimum hourly wage rate of experienced workers in 21	$1.75
23. Is an age or employment certificate on file in this establishment for this student-learner? (If not, see instructions)	Yes
24. Is it anticipated that the student-learner will be employed in the performance of a Government contact subject to the Walsh-Healey Public Contracts Act?	No

25. Outline training on-the-job (describe briefly the work process in which the student-learner will be trained and list the types of any machine used).

1. Propagating trees, shrubs vines or flowering plants
2 Pruning
3. Controlling Insects and Diseases
4 Regulating Heat Water Light and Humidity
5 Soil and Fertilizer Requirements
6 Planting Seeds and Cuttings
7. Grafting and Budding
8 Purchasing Stock + Equipment
9. Preparing for Shipment + Sal
10 Repairing + Maintaining Equipment
11. Merchandising + Bookkeeping
12 Landscape Design

26. Signature of student-learner:
I have read the statements made above and ask that the requested certificate, authorizing my employment training at special minimum wages and under the conditions stated, be granted by the Administrator or his authorized representative.

Bonnie Smith 5-7-64
(Signature of Student) (Date)

27. Certification by school official:
I certify that the student named herein will be receiving instruction at an accredited school and will be employed pursuant to a bona fide vocational training program, as defined in section 520.2 of Student-Learner Regulations.

Harry Ackman 5-7-64
(Signature of School Official) Date
Title Supt. of Schools

28. Certification by employer or authorized representative:
I certify, in applying for this special certificate, that all the foregoing statements are, to the best of my knowledge and belief, true and correct.

John L. Brown 5-7-64
(Signature of Employer or Rep.) Date
Title Owner

APPENDIX E.

HAZARDOUS OCCUPATIONS

(NOTE) (This section is taken from portions of Child Labor Bulletin No. 101 "A guide to Child Labor Provision of the Fair Labor Standards Act").

The Fair Labor Standards Act Provides a minimum age of 18 years for any occupation which the Secretary of Labor "shall find and by order declare" to be deterimental to the health or well being of young workers or particularly hazardous for them.

The 17 hazardous occupations orders now in effect apply in some cases on an industry basis, specifying the occupations in the industry that are not covered, and in some cases on an occupational basis irrespective of the industry in which found. Five of the hazardous occupations orders that have been issued (Orders Nos. 5, 8, 10, 12, 14, 16, and 17) contain exemptions for apprentices and student-learners when employed under the conditions set forth in the exemptions contained in the orders. The orders in effect do not apply to employment in agriculture.

HAZARDOUS OCCUPATIONS ORDERS

Those occupations declared to be particularly hazardous for minors between 16 and 18 years of age are included in the seventeen Hazardous Occupations Orders listed below:

ORDER NO. 1

MANUFACTURING OR STORAGE OCCUPATIONS INVOLVING EXPLOSIVES

The following occupations in or about plants or establishments manufacturing or storing explosives or articles containing explosive components:

(1) All occupations in or about any plant or establishment (other than retail establishments or plants or establishments of the type described in sub paragraph 2 of this paragraph) manufacturing or storing explosives or articles containing explosive components except where the occupation is performed in a "non-explosives area" as defined in sub paragraph (3) of this section.

(2) The following occupations in or about any plant or establishment manufacturing or storing small-arms ammunition not exceeding .60 caliber in size, shotgun shells, or blasting caps when manufactured or stored in conjunction with the manufacture of small-arms ammunition:

(a) All occupations involved in the manufacturing, mixing, transporting, or handling of explosive compounds in the manufacture of small-arm ammunition and all other occupations requiring the performance of any duties in the explosives area in which explosives compounds are manufactured or mixed.

(b) All occupations involved in the manufacturing, transporting, or handling of primers and all other occupations requiring the performance of any duties in the same building in which primers are manufactured.

(c) All occupations involved in the plate loading of cartridges and all other occupations requiring the performance of any duties in the same workroom in which rimfire cartridges are primed.

(d) All occupations involved in the plate loading of cartridges and in the operation of automatic loading machines.

(e) All occupations involved in the loading, inspecting, packing, shipping and storing of blasting caps.

Definitions

The term "plant or establishment manufacturing or storing explosives or articles containing explosive components" means the land with all the buildings and other structures thereon used in connection with the manufacturing or processing or storing of explosives or articles containing explosive components.

The terms "explosives" and "articles containing explosive components" mean and includes ammunition, black powder, blasting caps, fireworks, high explosives, primers, smokeless powder, and all goods classified and defined as explosives by the Interstate Commerce Commission in regulations for the transportation of explosives and other dangerous substances by common carrier.

(3) An area meeting all of the following criteria shall be deemed a "nonexplosives area".

(a) None of the work performed in the area involves the handling or use of explosives;

(b) The area is separated from the explosives area by a distance not less than that prescribed in the American Table of Distances for the protection of inhabited buildings;

(c) The area is separated from the explosives area by a fence or is otherwise located so that it constitutes a definite designated area; and

(d) Satisfactory controls have been established to prevent employees under 18 years of age within the area from entering any area in or about the plant which does not meet criteria (a) through (c).

ORDER NO. 2

MOTOR-VEHICLE OCCUPATIONS

The occupations of motor-vehicle driver and helper.

Definitions

The term "motor vehicle" shall mean any automobile, truck, truck-tractor, trailer, semitrailer, motorcycle, or similar vehicle propelled or drawn by mechanical power and designed for use as a means of transportation but shall not include any vehicle operated exclusively on rails.

The term "driver" shall mean any individual who, in the course of his employment, drives a motor vehicle at any time.

The term "helper" shall mean any individual, other than a driver, whose work includes riding on a motor vehicle for the purpose of assisting in transporting or delivering goods, but shall not apply to an individual riding in a passenger-type motor vehicle.

ORDER NO. 3

COAL-MINE OCCUPATIONS

All occupations in or about any coal mine, except the occupation of slate or other refuse picking at a picking table or picking chute in a tipple or breaker and occupations requiring the performance of duties solely in offices or in repair or maintenance shops located in the surface part of any coal-mining plant.

Definitions

The term "coal" shall mean any rank of coal, including lignite, bituminous, and anthracite coals.

The term "all occupations in or about any coal mine" shall mean all types of work performed in any underground working, openpit, or surface part of any coal-mining plant that contributes to the extraction, grading, cleaning, or other handling of coal.

ORDER NO. 4

LOGGING AND SAWMILLING OCCUPATIONS

All occupations in logging and all occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill except the following:

(1) Exceptions applying to logging:

(a) Work in offices or in repair or maintenance shops.

(b) Work in the construction, operation, repair, or maintenance of living and administrative quarters of logging camps.

(c) Work in timber cruising, surveying, or logging-engineering parties; work in the repair or maintenance of roads, railroads, or flumes; work in forest protection, such as clearing fire trails or roads, piling and burning slash, maintaining fire-fighting equipment, construction and maintaining telephone lines, or acting as fire lookout or fire patrolman away from the actual logging operations; Provided, that the provisions of this paragraph shall not apply to the felling or bucking of timber, the collecting or transporting of logs, the operation of power-driven machinery, the handling or use of explosives and work on trestles.

(d) Peeling of fence posts, pulpwood, chemical wood, excelsior wood, cordwood, or similar products, when not done in conjunction with and at the same time and place as other logging occupations declared hazardous by this section.

(e) Work in the feeding or care of animals.

(2) Exceptions applying to the operation of any permanent sawmill or the operation of any lath mill, shingle mill, or cooperage-stock mill; Provided, that these exceptions do not apply to a portable sawmill the lumber yard of which is used only for the temporary storage of green lumber and in connection with which no office or repair or maintenance shop is ordinarily maintained; and further Provided, that these exceptions do not apply to work which entails entering the sawmill building:

(a) Work in offices or in repair of maintenance shops.

(b) Straightening, marking, or tallying lumber on the dry chain or the dry drop sorter.

(c) Pulling lumber from the dry chain.

(d) Clean-up in the lumberyard.

(e) Piling, handling, or shipping of cooperage stock in yards or storage sheds, other than operating or assisting in the operation of power-driven equipment.

(f) Clerical work in yards or shipping sheds, such as done by ordermen, tallymen, and shipping clerks.

Definitions

The term "all occupations in logging" shall mean all work performed in connection with the felling of timber; the bucking or converting of timber into logs, poles, piles, ties, bolts, pulpwood, chemical wood, excelsior wood, cordwood, fence posts, or similar products; the collecting, skidding, yarding, loading, transporting, and unloading of such products in connection with logging; the constructing, repairing, and maintaining of roads, railroads, flumes, or camps used in connection with logging; the moving, installing, rigging, and maintenance of machinery or equipment used in logging; and other work performed in connection with logging. The term shall not apply to work performed in timber culture, timber-stand improvement, or in emergency firefighting.

The term "all occupations in the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill" shall mean all work performed in or about any such mill in connection with storing of logs and bolts; converting logs or bolts into sawn lumber, laths, shingles, or cooperage stock; storing, drying and shipping lumber, laths shingles cooperage stock, or other products of such mills; and other work performed in connection with the operation of any sawmill, lath mill, shingle mill, or cooperage-stock mill. The term shall not include work performed in the planing-mill department or other remanufacturing departments of any sawmill, or in any planing mill or remanufacturing plant not a part of a sawmill.

ORDER NO. 5

POWER-DRIVEN WOODWORKING MACHINE OCCUPATIONS

The following occupations involved in the operation of powerdriven woodworking machines:

(1) The occupation of operating power-driven woodworking machines including supervising or controlling the operation of such machines, feeding material into such machines, and helping the operator to feed material into such machines, but not including the placing of material on a moving chain or in a hopper or slide for automatic feeding.

(2) The occupations of setting up, adjusting, repairing, oiling, or cleaning power-driven woodworking machines.

(3) The operations of off-bearing from circular saws and from guillotineaction veneer clippers.

Definitions

(1) The term "power-driven woodworking machines" shall mean all fixed or portable machines or tools driven by power and used or designed for cutting, shaping, forming, surfacing, nailing, stappling, wire stitching, fastening, or otherwise assembling, pressing, or printing wood or veneer.

(2) The term "off-bearing" shall mean the removal of material or refuse directly from a saw table or from the point of operation. Operations not considered as off-bearing within the intent of this section include: (a) the removal of material or refuse from a circular saw or guillotine-action veneer clipper where the material or refuse has been conveyed away from the saw table or point of operation by a gravity chute or by some mechanical means such as a moving belt or expulsion roller, and (b) the following operations when they do not involve the removal of material or refuse directly from a saw table or from the point of operation; the carrying, moving, or transporting of materials from one machine to another or from one part of a plant to another; the piling stacking, or arranging of materials for feeding into a machine by another person; and the sorting, tying, bundling, or loading of materials.

Exemptions

Apprentices--This order shall not apply to the employment of apprentices in the occupations herein declared particularly hazardous: Provided, that (1) the apprentice is employed in a craft recognized as an apprenticeable trade, (2) the work of the apprentice training, is intermittent and for short periods of time, and is under the direct and clo supervision of a journeyman as a necessary part of such apprentice training, and (3) the apprentice is registered by the Bureau of Apprenticeship and Training of the United States Department of Labor as employed in accordance with the standards established by that Bureau, or is registered by a State agency as employed in accordance with the standards of the State Apprenticeship agency recognized by the Bureau of Apprenticeship and Training, or is employed under a written apprenticeship agreement under conditions which substantially conform to such Federal or State standards as determined by the Secretary of Labor.

Student-learners-This order shall not apply to the employment of a student-learner in occupations herein declared particularly hazardous: Provided, however, that such a student-learner is enrolled in a course of study and training in a cooperative vocational training program under a recognized State or local educational authority or in a course of study in a substantially similar program conducted by a private school: Provided, further, that such student-learner be employed under a written agreement which shall provide; (1) that the work of the student-learner in the occupations herein declared hazardous shall be incidental to his training, shall be intermittent and for short periods of time, and shall be under the direct and close supervision of a qualified and experienced person; (2) that safety instruction shall be given by the school and correlated by the employer with on-the-job training; and (3) that a schedule of organized and progressive work processes to be performed on the job shall have been prepared. Such a written agreement shall carry the name of the student-learner, and shall be signed by the employer and the school coordinator or principal. Copies of the agreement shall be kept on file by both the school and the employer. This exemption for the employment of student-learners may be revoked in any individual situation wherein it is found that reasonable precautions have not been observed for the safety of minors employed thereunder.

ORDER NO. 6

OCCUPATIONS INVOLVING EXPOSURE TO RADIOACTIVE SUBSTANCES AND TO IONIZING RADIATIONS

Any work in any workroom in which (a) radium is stored or used in the manufacture of self-luminous compound; (b) self-luminous compound is made, processed, or packaged; (c) self-luminous compound is stored, used, or worked upon; (d) incandescent mantles are made from fabric and solutions containing thorium salts, or are processed or packaged, (e) other radioactive substances are present in the air in average concentrations exceeding 10 per cent of the maximum permissible contractions in the air recommended for occupational exposure by the National Committee on Radiation Protection, as set forth in the 40-hour week column of table one of the National Bureau of Standards Handbook No. 69 entitled "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," issued June 5, 1959.

Definitions

As used in this section: the term "self-luminous compound" shall mean any mixture of phosphoreseent material and radium, mesothorium, or other radioactive element; the term "workroom" shall include the entire area bounded by walls of solid material and extending from floor to ceiling; the term "ionizing radiations" shall mean alpha and beta particles, electrons, protons, neutrons, gamma, and X-ray and all other radiations which produce ionizations directly or indirectly, but does not include electromagnetic radiations other than gamma and X-ray.

ORDER NO. 7

POWER-DRIVEN HOISTING APPARATUS OCCUPATIONS

The following occupations involved in the operations of power-driven hoisting apparatus:

(1) Work of operating an elevator, crane, derrick, hoist, or high-lift truck, except operating an unattended automatic operation passenger elevator or an electric or air-operated hoist not exceeding 1-ton capacity.

(2) Work which involves riding on a manlift or on a freight elevator, except a freight elevator operated by an assigned operator.

(3) Work of assisting in the operation of a crane derrick, or hoist performed by crane hookers, crane chasers, hookers-on, riggers, rigger helpers, and like occupations.

Definitions

The term "elevator" shall mean any power-driven hoisting or lowering mechanism equipped with a car or platform which moves in guides in a substantially vertical direction. The term shall include both passenger and freight elevators (including portable elevators or tiering machines), but shall not include dumbwaiters.

The term "crane" shall mean a power-driven machine for lifting and lowering a load and moving it horizontally, in which the hoisting mechanism is an integral part of the machine. The term shall include all types of cranes, such as cantilever gantry, crawler, gantry, hammerhead, ingot-pouring, jib, locomotive, motor truck, overhead traveling, pillar jib, pintle, portal, semigantry, semiportal, storage bridge, tower, walking jib, and wall cranes.

The term "derrick" shall mean a power-driven apparatus consisting of a mast or equivalent members held at the top by guys or braces, with or without a boom, for use with a hoisting mechanism and operating ropes. The term shall include all types of derricks, such as a frame, breast, Chicago boom, gin-pole, guy, and stiff-leg derricks.

The term "hoist" shall mean a power-driven apparatus for raising or lowering a load by the application of a pulling force that does not include a car or platform running in guides. The term shall include all types of hoists, such as base-mounted electric, clevis suspension, hook suspension, moorail, overhead electric, simple drum, and trolley suspension hoists.

The term "high-lift truck" shall mean a power-driven industrial type of truck used for lateral transportation that is equipped with a pewer-operated lifting device usually in the form of a fork or platform capable of tiering loaded pallets or skids one above the other. Instead of a fork, or platform, the lifting device may consist of a ram, scoop, shovel, crane, revolving fork, or their attachments for handling specific loads, The term shall mean and include high-lift trucks known under such names as fork lifts, fork trucks, fork-lift trucks, tiering trucks, or stacking trucks, but shall not mean low-lift trucks or low-lift platform trucks that are designed for the transportation of, but the teering of, material.

The term "manlift" shall mean a device intended for the conveyancy of persons which consists of platforms orbrackets mounted on, or attached to, an endless belt, cable, chain or similar method of suspension, such belt, cable, or chain operating in a substantially vertical direction and being supported by and driven through pulleys, sheaves or sprockets at the top or bottom.

ORDER NO. 8

POWER-DRIVEN METAL FORMING, PUNCHING, AND SHEARING MACHINE OCCUPATIONS

The occupations of operator of or helper on the following power-driven metal forming, punching, and shearing machines:

(1) All rolling machines, such as beading, straightening, corrugating, flanging, or bending rolls; and hot or cold rolling mills.

(2) All pressing or punching machines, such as punch presses except those provided with full automatic feed and ejection and with a fixed barrier guard to prevent the hands or fingers of the operator from entering the area between the dies; power presses; and plate punches.

(3) All bending machines, such as apron brakes and press brakes.

(4) All hammering machines, such as drop hammers and power hammers.

(5) All shearing machines, such as guillotine or squaring shears; aligator shears; and rotary shears.

The occupations of setting up, adjusting, repairing, oiling, or cleaning these machines including those with automatic feed and ejection.

Definitions

The term "operator" shall mean a person who operates a machine covered by this Order by performing such functions as starting or stopping the machine, placing materials into or removing them from the machine, or any other functions directly involved in operation of the machine.

The term "helper" shall mean a person who assists in the operation of a machine covered by this Order by helping place materials into or remove them from the machine.

The term "forming, punching, and shearing machines" shall mean power-driven metal-working machines, other than machine tools, which change the shape of or cut metal by means of tools, such as dies, rolls, or knives which are mounted on rams, plungers, or other moving parts. Types of forming, punching, and shearing machines enumerated in this section are the machines to which the designation is by custom applied.

Exemptions

Exemptions for apprentices and student-learners in Hazardous Occupations Order No. 5 apply also under this Order.

ORDER NO. 9

OCCUPATIONS IN CONNECTION WITH MINING, OTHER THAN COAL

All occupations in connection with mining, other than coal, except the following:

(1) Work in offices, in the warehouse or supply house, in the change house, in the laboratory, and in repair or maintenance shops not located underground.

(2) Work in the operation and maintenance of living quarters.

(3) Work outside the mine in surveying, in the repair and maintenance of roads, and in general clean-up about the mine property such as clearing brush and digging drainage dtiches.

(4) Work of track crews in the building and maintaining of sections of railroad track located in those areas of open-cut metal mines where mining and haulage activities are not being conducted at the time and place that such building and maintenance work is being done.

(5) Work in or about surface placer mining operations other than placer dredging operations and hydraulic placer mining operations.

(6) The following work in metal mills other than in mercury-recovery mills or mills using the cyanide process:

   (a) Work involving the operation of jigs, sludge tables, flotation cells, or drier-filters.

(b) Work of hand-sorting at picking table or picking belt.

(c) General clean-up work:

Provided, however, that nothing in this section shall be construed as permitting employment of minors in any occupation prohibited by any other hazardous occupations order issued by the Secretary of Labor.

Definitions

As used in this section: The term "all occupations in connection with mining, other than coal" shall mean all work performed underground in mines and quarries; on the surface at underground mines and underground quarries; in or about open-cut mines, open quarries, clay pits, and sand and gravel operations; at or about placer mining operations; at or about dredging operations for clay, sand or gravel; at ar about bore-hole mining operations; in or about all metal mills washer plants, or grinding mills reducing the bulk of the extracted minerals; and at or about any other crushing, grinding, screening, sizing, washing or cleaning operations performed upon the extracted minerals except where such operations are performed as a part of a manufacturing process. The term shall not include work performed in subsequent manufacturing or processing operations, such as work performed in smelters, electrometallurgical plants, refineries, reduction plants, cement mills, plants where quarried stone is cut, sanded and further processed or plants manufacturing clay, glass or ceramic products. Neither shall the term include work performed in connection with coal mining, in petroleum production, in natural-gas production, nor in dredging operations which are not a part of mining operations, such as dredging for construction or navigation purposes.

ORDER NO. 10

OCCUPATIONS INVOLVING SLAUGHTERING, MEAT PACKING OR PROCESSING, OR RENDERING

The following occupations in or about slaughtering and meat packing establishments, rendering plants, or wholesale, retail or service establishments are particularly hazardous for the employment of minors between 16 and 18 years of age or detrimental to their health or well-being:

(1) All occupations on the killing floor, in curing cellars, and in hide cellars, except the work of messengers, runners, hand truckers, and similar occupations which require entering such workrooms or workplaces infrequently and for short periods of time.

(2) All occupations involved in the recovery of lard and oils, except packaging and shipping of such products and the operation of hard-roll machines.

(3) All occupations involved in the tankage or rendering of dead animals, animal offal, animal fats, scrap meats, blood, and bones into stock feeds, tallow, inedible greases fertilizer ingredients, and similar products.

(4) All occupations involved in the operation or feeding of the following power-driven meat-processing machines, including setting-up, adjusting, repairing, oiling, or cleaning such machines: meat and bone cutting saws, knives (except bacon slicing machines), head-splitters, and guillotine cutters; snout-pullers and jaw-pullers; skinning machines; horizontal rotary washing machines; casing-cleaning machines such as crushing, stripping, and finishing machines; grinding, mixing, chopping, and hashing machines; and presses (except belly-rolling machines).

(5) All boning occupations.

(6) All occupations that involved the pushing or dropping of any suspended carcass, half carcass, or quarter carcass.

(7) All occupations involving hand-lifting or hand-carrying any carcass or half carcass of beef, or horse, or any quarter carcass of beef or horse.

Definitions

The term "slaughtering and meat packing establishments" shall mean places in or about which cattle, calves, hogs, sheep, lambs, goats, or horses are killed, butchered, or processed. The term shall also include establishments which manufacture or process meat products or sausage casings from such animals.

The term "rendering plants" shall mean establishments engaged in the conversion of dead animals, animal offal, animal fats, scrap meats, blood, and bones into stock feeds, tallow, inedible greases, fertilizer ingredients, and similar products.

The term "killing floor" shall include that workroom or workplace where cattle, calves, hogs, sheep, lamb, goats, or dressed prior to chilling.

The term "curing cellar" shall include that workroom or workplace which is primarily devoted to the preservation and flavoring of meat by curing materials. It does not include that workroom or workplace where meats are smoked.

The term "hide cellar" shall include that workroom or workplace where hides are graded, trimmed, salted, and otherwise cured.

The term "boning occupations" shall mean the removal of bones from meat cuts. It shall not include work that involves cutting, scrapping, or trimming meat from cuts containing bones.

Exemptions

The killing and processing of poultry, rabbits, or small game in areas physically separated from the killing floor.

Exemptions for apprentices and student-learners in Hazardous Occupations Order No. 5 apply also under this Order.

ORDER NO. 11

POWER-DRIVEN BAKERY MACHINE OCCUPATIONS

The following occupations involved in the operation of power-driven bakery machines:

(1) The occupations of operating, assisting to operate, or setting up, adjusting, repairing, oiling, or cleaning any horizontal or vertical dough mixer; batter mixer; bread dividing, round, or molding machine, dough brake; dough sheeter; combination bread slicing and wrapping machine; or cake cutting band saw.

(2) The occupation of setting up or adjusting a cooky or cracker machine.

ORDER NO. 12

POWER-DRIVEN PAPER-PRODUCTS MACHINE OCCUPATIONS

The occupations of operating or assisting to operate any of the following power-driven paper-products machines:

(1) Arm-type wire stitcher or stapler, circular or band saw, corner cutter or mitering machine, corrugating and single- or double-facing machine, envelope die-cutting press, guillotine paper cutter or shear, horizontal bar scorer, laminating or combining machine, sheeting machine, scrap-paper baler, or vertical slotter.

(2) Platen die-cutting press, platen printing press, or punch press which involves hand feeding of the machine.

The occupations of setting up, adjusting, repairing, oiling, or cleaning these machines including those which do not involve hand feeding.

Definitions

The term "operating or assisting to operate" shall mean all work which involves starting or stopping a machine covered by this Order, placing materials into or removing them from the machine, or any other work directly involved in operating the machine.

The term "paper-products machine" shall mean power-driven machines used in the remanufacture or conversion of paper or pulp into a finished product. The term is understood to apply to such machines whether they are used in establishments that manufacture converted paper or pulp products, or in any other type of manufacturing or nonmanufacturing establishment.

Exemptions

Exemptions for apprentices and student-learners in Hazardous Occupations Order No. 5 apply also under this Order.

ORDER NO. 13

OCCUPATIONS INVOLVED IN THE MANUFACTURE OF BRICK, TILE, AND KINDRED PRODUCTS

The following occupations involved in the manufacture of clay construction products and of silica refractory products:

(1) All work in or about establishments in which clay construction products are manufactured, except (a) work in storage and shipping; (b) work in offices, laboratories, and storerooms; and (c) work in the drying departments of plants manufacturing sewer pipe.

(2) All work in or about establishments in which silica brick or other silica refractories are manufactured, except work in offices.

(3) Nothing in this section shall be construed as permitting employment of minors in any occupation prohibited by any other hazardous occupations order issued by the Secretary of Labor.

Definitions

The term "clay construction products" shall mean the following clay products: Brick, hollow structural tile, sewer pipe and kindred products, refractories, and other clay products such as architectural terra cotta, glazed structural tile, roofing tile, stove lining, chimney pipes and tops, wall coping, and drain tile. The term shall not include the following non-structural--bearing clay products: ceramic floor and wall tile, mosaic tile, glazed and enameled tile, faience, and similar tile, nor shall the term include nonclay construction products such as sand-lime brick, glass brick, or nonclay refractories.

The term "silica brick or other silica refractories" shall mean refractory products produced from raw materials containing free silica as their main constituent.

ORDER NO. 14

OCCUPATIONS INVOLVED IN THE OPERATION OF POWER-DRIVEN CIRCULAR SAWS, BAND SAWS, AND GUILLOTINE SHEARS

The occupations of operator of or helper on the following power-driven fixed or portable machines except machines equipped with full automatic feed and ejection:

(1) Circular saws.

(2) Band saws.

(3) Guillotine shears.

The occupations of setting up, adjusting, repairing, oiling, or cleaning circular saws, band saws, and guillotine shears.

Definitions

The term "operator" shall mean a person who operates a machine covered by this Order by performing such functions as starting or stopping the machine, placing materials into or removing them from the machine, or any other functions directly involved in operation of the machine.

The term "helper" shall mean a person who assists in the operation of a machine covered by this Order by helping place materials into or remove them from the machine.

The term "machines equipped with full automatic feed and ejection shall mean machines covered by this Order which are equipped with devices for full automatic feeding and ejection and with a fixed barrier guard to prevent completely the operator or helper from placing any part of his body in the point-of-operation area.

The term "band saw" shall mean a machine equipped with an endless steel band having a continuous series of notches or teeth, running over wheels or pulleys, and used for sawing materials.

The term "circular saw" shall mean a machine equipped with a thin steel disc having a continuous series of notches or teeth on the periphery, mounted on shafting, and used for sawing materials.

The term "guillotine shear" shall mean a machine equipped with a movable blade operated vertically and used to shear materials. The term shall not include other types of shearing machines, using a different form of shearing action, such as alligator shears or circular shears.

Exemptions

Exemptions for apprentices and student-learners in Hazardous Occupations Order No. 5 apply also under this Order.

ORDER NO. 15

OCCUPATIONS INVOLVED IN WRECKING, DEMOLITION, AND SHIPBREAKING OPERATIONS

All occupations in "wrecking demolition, and shipbreaking operations."

Definitions

The term "wrecking, demolition, and shipbreaking operations" shall mean all work, including clean-up and salvage work, performed at the site of the total or partial razing, demolishing, or dismantling of a building, bridge, steeple, tower, chimney, other structure, ship or other vessel.

ORDER NO. 16

OCCUPATIONS IN ROOFING OPERATIONS

All occupations in roofing operations.

Definitions

The term "roofing operations" shall mean all work performed in connection with the application of weather proofing materials and substances (such as tar or pitch, asphalt prepared paper, tile, slate, metal, translucent materials, and shingles of asbestos, asphalt or wood) to roofs of buildings or other structures. The term shall also include all work performed in connection with: (1) The installation of roofs, including related metal work such as flashing and (2) alterations, additions, maintenance, and repair, including painting and coating, of existing roofs. The term shall not include gutter and downspout work; the construction of the sheathing or base of roofs; or the installation of television antennas, air conditioners, exhaust and ventilating equipment, or similar appliances attached to roofs.

Exemptions

Exemptions for apprentices and student-learners contained in Hazardous Occupations Order No. 5 apply also under this Order.

ORDER NO. 17

OCCUPATIONS IN EXCAVATION OPERATIONS

The following occupations in excavation operation are particularly hazardous for the employment of persons between 16 and 18 years of age:

(1) Excavating, working in, or backfilling (refilling) trenches, except (i) manually excavating or manually backfilling trenches that do not exceed four feet in depth at any point, or (ii) working in trenches that do not exceed four feet in depth at any point.

(2) Excavating for buildings or working in such excavations, except (i) manually excavating to a depth not exceeding four feet below any ground surface adjoining the excavation, or (ii) working in an excavation not exceeding such depth, or (iii) working in an excavation where the side walls are shored or sloped to the angle of repose.

(3) Working within tunnels prior to the completion of all driving and shoring operations.

(4) Working within shafts prior to the completion of all sinking and shoring operations.

Exemptions for apprentices and student-learners in Hazardous Occupations Order No. 5 apply also under this Order.

APPENDIX F. - SOCIAL SECURITY, WITHHOLDING TAX, LABOR UNIONS

SOCIAL SECURITY, WITHHOLDING TAX, LABOR UNIONS

General

Since any student participating in this type of training program is a paid employee, certain factors apply to him as they would apply to any other employees of the training center. Just because he is a student, he is not relieved of these responsibilities.

Social Security

If a student does not have a Social Security account number, which is shown on the social security card, he should check at the nearest social security office. If there is no social security office in his town, he may ask at the post office for an application blank.

Withholding Tax

The employer will withhold a certain portion of the students wages from his pay period for Federal income tax purposes. If the earnings during a calendar year does not exceed $600.00 (this includes any other earnings the student may receive during the year) the student may file for a refund.

Labor Unions

Before any student is placed in a training center, it should be determined to what extent, if any, the labor unions representing employees are involved. This information should be secured when the form for determining possible Training Centers is completed. As each training center is an individual establishment, and the occupational training may vary, each student's case must be handled individually. It is the responsibility of the school to insure that this determination is made.

APPENIDX G. - AGRICULTURAL OCCUPATIONS OTHER THAN FARMING

PARTIAL LIST OF AGRICULTURAL OCCUPATIONS OTHER THAN FARMING AND RANCHING, CLASSIFIED BY AGRICULTURAL OCCUPATION FAMILIES

I. FARM MACHINERY SALES AND SERVICE OCCUPATIONS

100 Blacksmith, welder, and general repairman
101 Custom farm machine operator
102 Farm machinery mechanic's helper
103 Farm machinery mechanics
104 Farm machinery service center foreman
105 Farm machinery parts helper or clerk
106 Farm machinery parts manager
107 Farm machinery salesman
108 Farm machinery fieldman
109 Farm tire service operator
110 Manager
111 Assistant Manager
112 Office worker
150 Other

II. FARM SUPPLIES AND EQUIPMENT OCCUPATIONS

200 Country store clerk
201 Farm hardware and equipment store employee
202 Farm hardware and equipment store manager
203 Farm hardware and equipment store assistant manager
204 Farm hardware and equipment store office worker (bookkeeper, clerk)
205 Farm equipment fieldman
206 Farm equipment serviceman
207 Feed salesman
208 Feed mill employee
209 Farm cooperative service store employee
210 Farm equipment and supplies salesman
211 Truck driver for a feed mill or farmer cooperative
212 Truck driver for a rural gasoline and oil distributor
213 Truck driver for spreading bulk fertilizer
250 Other

III. LIVEBTOCK AND POULTRY INDUSTRIES OCCUPATIONS

a. Dairying, dairy manufacturing and processing

300 Dairy herd supervisor
301 Dairy plant employee
302 Dairy plant manager
303 DHIA testor

III. Livestock and Poultry Industries Occupations, Continued

304 Milk sanitarian
305 Milk truck driver
306 Other

b. Livestock Marketing and Processing

320 Butcher
321 Meat department manager
322 Livestock auction employee
323 Livestock auctioners
324 Livestock auction manager
325 Livestock buyer
326 Livestock dealer
327 Livestock truck driver
328 Slaughter house or locker plant manager
329 Slaughter house or locker plant employee
330 Stockyard employee
331 Other

c. Poultry Industry Occupations

340 Egg grader
341 Egg inspector
342 Hatchery employee
343 Hatchery manager
344 Poultry and egg buyer
345 Poultry debeaker
346 Poultry processing plant manager
347 Poultry proeessing plant assistant manager
348 Poultry sexer
349 Other

d. Livestock Industry Occupations (Not elsewhere classified)

360 Animal industry laboratory technician
361 Animal industry laboratory assistant
362 Animal industry laboratory veterinarian
363 Apiary inspector
364 Livestock disease control worker
365 Veterinarian
366 Veterinarian's Assistant
367 Other

IV. CROPS, FORESTRY, AND SOIL CONSERVATION OCCUPATIONS

400 Cannery or processing plant employee
401 Cannery or processing plant fieldman
402 Field crop, fruit and vegetable inspection employee
403 Forester

IV. CROPS, FORESTRY, AND SOIL CONSERVATION OCCUPATIONS, Continued

404	Fruit and vegetable produce buyer
405	Fruit and vegetable employee
406	Fruit and vegetable manager
407	Grain elevator employee
408	Grain elevator manager
409	Irrigation ditch rider
410	Lumberman or sawmill employee
411	Sawmill employee
412	Sawmill foreman
413	Manager
414	Soil conservationist
415	Soil convervationist aid
416	Soil conservation technician
417	State or national forest employee
418	Woodsman
419	Other

V. ORNAMENTAL HORTICULTURE OCCUPATIONS

501	City, state or national park employee
502	Florist or flower grower
503	Garden center employee
504	Garden center manager
505	Greenhouse employee
506	Greenhouse manager
507	Golf course superintendent
508	Gold course employee
509	Ground maintenance employee
510	Landscape architect
511	Landscape gardner
512	Nursery employee
513	Nursery manager
514	Tree pruner
515	Tree surgeon
516	Other

VI. WILDLIFE AND RECREATION OCCUPATIONS

601	Fish warden
602	Game bird propagator
603	Game management employee
604	Other

VII. FARM SERVICE OCCUPATIONS

701	Artificial inseminator
702	Country butchers
703	Crop duster
704	Crop pollinator
705	Crop sprayer
706	Custom farm machine worker
707	Farm appraiser
708	Farm building painter
709	Farm building renovator
710	Feed and hammer mill
711	Field supervisor (A.S.C.)
712	Fruit caretaker
713	Fruit sprayer
714	Lime spreader
715	Mobile blacksmith shop operator
716	Mobile repair shop operator
717	Rural insurance representative
718	Rural real estate representative
719	Sheep dipper
720	Sheep shearer
721	Other

VIII. AGRICULTURAL SERVICE OCCUPATIONS

801	Farm auctioneer
802	A.S.C. field superintendent
803	A.S.C. office manager
804	A.S.C. checker
805	Farm placement representative
806	Farm advisory work, consultant
807	Field representative for agricultural marketing business
808	Ag advertising
809	Ag newspaper and magazine work
810	Farm appraiser
811	Farmer organization staff person
812	Agricultural economist
813	Agricultural engineer
814	Agricultural journalist
815	Agronomist
816	Agricultural college instructor
817	Entomologist
818	Extension work - county agent
819	Plant pathologist
820	Rural sociologist
821	Soil conservationist
822	Vocational agriculture instructor
850	Other

APPENDIX H. - TECHNIQUES FOR MAKING INTERVIEWS

GENERAL INFORMATION CONCERNING INTERVIEWING TECHNIQUES

The research interview is the most widely used and one of the most valid methods of data gathering. When several interviewers are working, it is important to eliminate differences in the results obtained by various persons. To a large extent differences can be attributed to lack of preparation of the interviewer as to the basic techniques and procedures of interviewing. The purpose of this information is to provide a basic understanding of the fundamentals of collecting useful data by means of interview.

The following points are intended to serve as guides to better prepare an individual for interviewing persons in managerial or personnel positions of firms, business, industries, agencies, or organizations employing agricultural workers:

1. The desired data can best be obtained from persons in a position to be thoroughly familiar with the characteristics and requirements of all positions. The interview should be obtained from a person in a managerial position. It is best to obtain an appointment in advance in order to interview the person who could provide the desired information.

2. The interview should begin by:

   (a) Introducing yourself, briefly stating why you are there. Mention that the school and local Chamber of Commerce or other civic groups approved of the survey.

   (b) Explaining the purpose and objectives of the survey.

   An example of an introductory statement is:
   "I am________________________, teacher of vocational agriculture at __________________, High School. The local high school has plans for initiating a cooperative work experience program. We feel a program of this type can be of definite benefit to establishments like yours. Before beginning a program of this type, we need to secure factual information from the people that will be directly involved in it.

(c) Note about how much time you would like. If the size of the task later becomes more time consuming, the interviewer will then be acquainted and in sympathy with the need for more time.

(d) Give a general idea of what use can be made of the data collected. Develop a brief recognition of the need for vocational training of our youth. Try to develop a sympathetic attitude toward this survey effort.

3. The interview should be conducted in a location which is conducive to effective interviewing. An office away from distractions of the business is best.

4. Rapport is essential to effective interviewing. Good interviewing relations exist when both the interviewer and interviewee feel relaxed and at ease in each other's presence.

5. It is desirable to "keep out" of the interview as much as possible. It is natural to "want to help" in determining the responses to some questions, but remember, the validity of the results depends on the information provided by the employers.

6. It is best to follow the interview instrument from top to to bottom as closely as possible.

7. It will be necessary to define the meaning of some of the questions asked on the form so it is imperative that you become thoroughly familiar with all points of the instrument. As the interview progresses, a description of the program can be presented.

8. Responses should be recorded as clearly and concisely as possible.

9. The interview should be terminated by thanking the interviewee for his time and information, assuring him of the usefulness of the data supplied. If it is necessary to return later for additional information, ask the interviewee for his cooperation at a future date.

APPENDIX I. - EXAMPLE OF COMPLETION OF TRAINING CERTIFICATE

_______________________ PUBLIC SCHOOLS

VOCATIONAL AGRICULTURE DEPARTMENT

Certificate of Completion of Agricultural
Occupations Training

Be It Known That

____
(Student)

has satisfactorily completed_________ years(s) of training as

____ including
(Occupation trained for)

related classroom instruction and on-the-job instruction supervised cooperatively by the school and the employer.

Dated this_________day of_________ 19_____
at________________________, Colorado

____
(Superintendent of Schools)

____
(President of School Board)

____
(Chairman Advisory Committee)

____
(Ag. Occupations Teacher-Coordinator)

APPENDIX J. - EXAMPLE OF COOPERATING INSTRUCTORS CERTIFICATE

(Example of a Cooperating Instructor Certificate)

____________________PUBLIC SCHOOLS

VOCATIONAL AGRICULTURE DEPARTMENT

Bet it known that

____
(Name of Instructor)

has been designated as an on-the-job instructor, and is qualified to

offer instruction in ______________________________________
(Type of Job in Which Training is Given)

in conjunction with the Agricultural Occupations Program at____________________

____High School.

Dated this _____ day of ______________ 19______

at______________________________, Colorado.

____
(Superintendent of Schools)

____
(Chairman Advisory Committee)

____
(Ag. Occupations Teacher-Coordinator)

APPENDIX K. - GLOSSARY

Advisory Council refers to a group of persons, usually outside the education profession, selected for the purpose of offering advice and counsel to the school regarding the vocational program, with particular attention toward keeping the program practical and attuned to community needs. Members are representatives of the local community who are interested in the activities with which the Agricultural Occupations program is concerned.

Agricultural Occupation refers to an occupation in which the worker needs competencies in one or more of the primary areas of plant science, animal science, agricultural mechanization, and agricultural business management.

Agricultural Occupations Programs refers to a program to provide supervised training for gainful employment in agricultural occupations. The program is accomplished by establishing a cooperative arrangement between the school and the agricultural businesses or industries in the community.

Area Vocational School refers to a school offering specialized training in various occupations to prospective students in a large geographical territory usually involving more than one school district.

Completion Certificate refers to a certificate stating a student has satisfactorily completed one or two years of Agricultural Occupations training program.

Coordination refers to the process of correlating and bringing into harmony all of the various aspects of an Agricultural Occupations training program.

Follow-up Study refers to a survey to determine what occupations the graduates of agricultural occupations courses enter and how effective their training was in relationship to actual needs of the job.

Hazardous Occupation refers to an occupation considered dangerous and injurious to the health and well being of minors of up to 18 years of age. Controlled by State and Federal laws.

Related Instruction refers to classroom and laboratory instruction designed to increase knowledge, understanding and ability to solve technical and theoretical problems concerned with a particular occupation.

Student-Learner refers to a student enrolled in a vocational cooperative work experience program.

Student-Learner Certificate refers to a certificate which will enable students enrolled in agricultural occupations training to be exempt from certain provisions of the Fair Labor Standards Act. The student must meet certain requirements before being eligible for the certificate.

Student Information Sheet refers to a form kept by the teacher-coordinator, listing specific information concerning each student enrolled in the agricultural occupations program.

Study Guide refers to a guide designed to enable trainees to study the related instructional material on an individual basis. Each study guide should correspond to the individual training plan of the trainee for a specific occupation.

Teacher-Coordinator refers to the vocational agriculture instructor who has the responsibility for teaching the related instruction and for coordinating the agricultural occupations program.

Training Agreement refers to a document listing the terms of employment of a trainee in an approved Training Center.

Training Center refers to the agricultural business or firm in which the trainee will work while participating in the agricultural occupations program. Sometimes referred to as a "Training Station".

Training Plan refers to a listing of the activities in which the trainee will be engaged at the Training Center. In addition, there appears a listing of the information that should be taught in the related instruction class. Sometimes referred to as the "Training Outline".